

LONDON SCHOOL OF TROPICAL MEDICINE
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COLONY OF MAURITIUS.

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ANNUAL REPORT

ON THE

MEDICAL

AND

HEALTH DEPARTMENT

FOR

1906.

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# ANNUAL REPORT

## ON THE

# Medical and Health Department

## for 1906.

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### I.—STATISTICS OF POPULATION.

The estimated population of the Colony on 31.12.06 amounted to 375,400 which shows a decrease of 2,132 when compared with the figures of the previous year.

The number of immigrants, 4,526, has exceeded that of emigrants, 4,209, by 317 ; but this small factor of increase has been more than counterbalanced by the large excess, 2,449, of deaths over births, a fact due not to an increased mortality but to a considerable fall in the birth-rate.

The deaths during the year under review amounted to 15,118 giving a mortality of 40 per mille against 15,379 with a rate of 40.6 per thousand in 1905 showing consequently a fall of .6 per thousand.

The birth-rate which stood at 37.6 per mille in 1904 and 37 in 1905 has undergone a still more marked decrease during 1906 when it reached 33.5 per thousand.

The above statistical information is derived from the more ample statement borne on Annexure I (a) which has been kindly placed at the disposal of this Department by the Registrar General.

### II.—PREVALENCE OF SICKNESS.

The admissions into the Hospitals and Asylums numbered 20,371 in 1906 against 20,735 in 1905 showing therefore a decrease of 364.

The case-mortality however rose from 5.52 o/o during 1905 to 5.85 o/o during the year under review.

The number of cases treated at the Dispensaries stands at 56,354 against 59,400 in 1905, showing a decrease of 3,046.

It has already been seen above that the general death-rate of the Colony was slightly lower than that for the previous year, so that in spite of the slightly increased case-mortality in the hospitals, which can be explained by the fact that a greater number of advanced or hopeless cases sought treatment in these establishments, the general sanitary condition of the Colony has, on the whole, been slightly more satisfactory than that which obtained during the previous year.

*Malarial Fever* : Malarial fever is answerable for 3,674 admissions in the hospitals. This figure is lower than that of the previous year by 1,449.

The different forms of the disease were returned as follows :—

|            |     |     |             |
|------------|-----|-----|-------------|
| Quotidian  | ... | ... | 2,336       |
| Tertian    | ... | ... | 131         |
| Quartan    | ... | ... | 45          |
| Irregular  | ... | ... | 121         |
| Remittent  | ... | ... | 99          |
| Pernicious | ... | ... | 32          |
| Unclassed  | ... | ... | 910         |
|            |     |     | Total 3,674 |

Thirty-eight cases ended fatally, the case-mortality standing at 1.02 o/o.

On the other hand, according to the Civil Status Returns, the number of deaths attributed to malaria among the population in 1906 was 5,827 which, if this basis could have served for inferences, would have indicated that there had been during the year about 582,700 cases of the disease while the population is estimated at 375,400. But, while such a calculation could to a certain extent be depended upon to give approximate information in the case of diseases which, as a rule, only attack the sufferers once during their life-time, it is well known that the method is surrounded by too many fallacies and pitfalls to permit of reliable deductions being made in the case of malarial incidence and its results.

These figures are however given to bring under notice the serious mistakes which would be made if too much reliance were placed on the high total which is registered as representing the mortality from fever in the Island, and if they were adopted to estimate the prevalence of malaria in the Colony and in the various districts.

Attention has already been drawn to the errors which are inherent to the vital statistics of this Colony owing to the mode of registration and declaration of deaths and these causes need not be insisted upon.

The mortality from malaria is unduly swelled by the tendency which exists not only among the ignorant but among others who find it convenient to attribute the fatal issue to the more common and prominent symptom of most of the acute diseases: fever.

This is borne out by the comparison of the death statistics before and after 1899 for those districts where the medical certification of deaths has been most generally and systematically enforced since the outbreak of plague.

In 1896, 1897 and 1898, the proportion of deaths attributed to malaria is practically and uniformly half the total number of deaths registered in Port Louis and very nearly half for Plaines Wilhems.

After 1899, the proportion drops to 1/3, 1/4, 1/5 and even to 1/6 in 1904 for the district of Port Louis, and as low as 1/9 for Plaines Wilhems in 1902 and 1904, even after deducting the deaths from plague from the total number of deaths. Whilst for such districts as Black River and Flacq, for example, where it has not been possible to exercise such a medical supervision, the proportion of deaths registered as due to malaria has been uniformly higher than one half the total number of deaths during the ten years under comparison, no drop or change of any kind being noticeable before or after 1899 in the proportion.

Annexure III illustrates clearly the above considerations. It gives, according to the returns of the Civil Status, the number of deaths attributed to malaria, and the total number of deaths from all causes (excluding those from plague since 1899).

The deduction of the deaths from plague since 1899 from the total number of deaths had to be done in order that the basis of comparison before and after 1899 might be the same. Otherwise the figures since 1899 would have been unduly swelled in comparison with those before that year, as plague did not exist in the three first years of the comparison, viz: 1896, 1897 and 1898. The fact that, in spite of these deductions in the total number of deaths, such big drops are recorded in the proportion of deaths due to malaria only gives more point to these conclusions and render them more striking.

However that may be, the tribute of mortality paid to fever



annually is so high and the ill-health with the concomitant miseries arising from the prevalence of malaria in the Colony are so onerous that it is highly desirable that energetic measures be taken to combat that scourge.

*Hypertrophy of the Spleen* :—The number of admissions for that complaint, viz : 656 is practically the same as that of the previous year which stood at 657, the mortality being 40.

*Dysentery* :—The number of persons, 794 who resorted to the different hospitals for relief on account of that complaint shows a considerable reduction when compared with that of the previous year when it stood at 1,013. The disease has also been less virulent in its attacks as evidenced by the case-mortality which has only been 14.9 o/o against 16.5 in 1905 and 17.2 in 1904. As usual, the reduction in the incidence of dysentery coincides with a decrease in that of malaria noted above.

*Enteric fever* :—Only six admissions for that complaint were registered in hospitals and among these one death occurred. In addition to these cases, 75 others were notified in compliance with the Contagious Disease Ordinance.

The following table shows the occurrence of the disease as reported from the different districts of the Colony during the year :—

| Months.      | Districts.  |                |                |        |             |          |                  |              |       | Total. |
|--------------|-------------|----------------|----------------|--------|-------------|----------|------------------|--------------|-------|--------|
|              | Port Louis. | Pamplemousses. | R. du Rempart. | Flacq. | Grand Port. | Savanne. | Plaines Wilhems. | Black River. | Moka. |        |
| January ...  | ...         | ...            | 3              | ...    | ...         | ...      | 1                | ...          | 1     | 5      |
| February ... | ...         | ...            | ...            | ...    | 2           | 3        | 4                | ...          | 5     | 14     |
| March ...    | ...         | ...            | ...            | ...    | ...         | 1        | 3                | ...          | 1     | 7      |
| April ...    | ...         | ...            | 1              | ...    | ...         | 1        | 2                | ...          | 2     | 6      |
| May ...      | 4           | ...            | ...            | ...    | ...         | 1        | 5                | ...          | ...   | 10     |
| June ...     | ...         | ...            | ...            | ...    | ...         | 4        | 3                | ...          | ...   | 7      |
| July ...     | ...         | ...            | 1              | ...    | 2           | ...      | ...              | ...          | ...   | 3      |
| August ..    | ...         | ...            | ...            | ...    | ...         | ...      | 3                | ...          | ...   | 3      |
| September..  | ...         | ...            | ...            | ...    | ...         | ...      | 2                | ...          | ...   | 2      |
| October ...  | ...         | ...            | ...            | ...    | ...         | ...      | 3                | ...          | ...   | 3      |
| November ..  | ...         | 1              | ...            | ...    | 1           | ...      | 7                | ...          | ...   | 9      |
| December...  | ...         | ...            | 3              | ...    | ...         | 2        | 5                | ...          | 2     | 12     |
| Total ...    | 4           | 1              | 8              | ...    | 5           | 12       | 40               | ...          | 11    | 81     |

The reasons for the larger incidence in Plaines Wilhems District have already been referred to at length in previous reports, but the total or comparative absence of the disease from some Districts cannot be satisfactorily accounted for and leaves the impression that all the cases of typhoid are not brought to notice. This is the more so as the unsatisfactory condition of the water supply of those localities can be judged by the number of cases of dysentery and diarrhœa returned from them.

*Diphtheria* :—The number of cases admitted into hospital with the disease stands at 7, three of which terminated fatally, against 3 cases with 2 deaths during 1905.

Besides the above, 26 were notified in accordance with the Contagious Disease Ordinance. The following table shows in a comparative form the regional distribution of the cases as well as the monthly incidence of the disease :—

| Months.      | Districts.  |                |                |        |             |          |                  |       |              | Total. |
|--------------|-------------|----------------|----------------|--------|-------------|----------|------------------|-------|--------------|--------|
|              | Port Louis. | Pamplemousses. | R. du Rempart. | Flacq. | Grand Port. | Savanne. | Plaines Wilhems. | Moka. | Black River. |        |
| January ...  | ...         | ...            | 1†             | ...    | ...         | ...      | ...              | ...   | ...          | 1      |
| February ... | ...         | ...            | ...            | ...    | ...         | ...      | 5                | ...   | 1            | 6      |
| March ...    | ...         | ...            | 3              | ...    | ...         | ...      | 5                | ...   | ...          | 8      |
| April ...    | ...         | ...            | ...            | ...    | ...         | ...      | 2                | ...   | ...          | 2      |
| May ...      | 2           | ...            | ...            | ...    | ...         | ...      | 1                | ...   | ...          | 3      |
| June ...     | ...         | ...            | ...            | ...    | ...         | ...      | 3                | ...   | ...          | 3      |
| July ...     | ...         | ...            | ...            | ...    | ...         | ...      | 3                | ...   | ...          | 3      |
| August ...   | 1           | ...            | ...            | ...    | ...         | ...      | ...              | ...   | ...          | 1      |
| September .. | ...         | ...            | ...            | ...    | ...         | ...      | 1                | ...   | ...          | 1      |
| October ...  | ...         | ...            | ...            | ...    | ...         | ...      | 1                | ...   | ...          | 1      |
| November ... | 1*          | ...            | 1              | ...    | ...         | ...      | 2                | ...   | ...          | 4      |
| December ... | ...         | ...            | ...            | ...    | ...         | ...      | ...              | ...   | ...          | ...    |
| Total...     | 4           | ...            | 5              | ...    | ...         | ...      | 23               | ...   | 1            | 33     |

The greater incidence of the disease in the summer months is noteworthy and appears to be connected with the dampness inseparable from the rainy season, such being particularly the case in the higher regions of Plaines Wilhems.

*Influenza* :—The number of admissions for that complaint, viz : 1,768, shows a considerable increase over that recorded for 1905 which stood at 1,039. This disease assumed an epidemic character in June and its incidence reached its acme in July when 1,023 cases were registered in the different hospitals. The case-mortality however shows only a slight increase, .5 o/o, over that of 1905 which stood at 4 o/o. But in estimating the virulence of the disease from what has been observed in hospital, it is but fair to bear in mind the fatal issues due to the complications or sequelæ of the disease. It will be observed below, for instance, that pneumonia and bronchitis which are so frequently manifestations only of influenza are responsible for an increased number of deaths.

Again, although according to the hospital returns the virulence of the disease does not appear to have been very great, yet the complaint was wide spread and carried off quite a large number of people among the old, the debilitated and the careless who did not take the necessary precautions to ward off complications.

In connection with this outbreak, instructions were issued

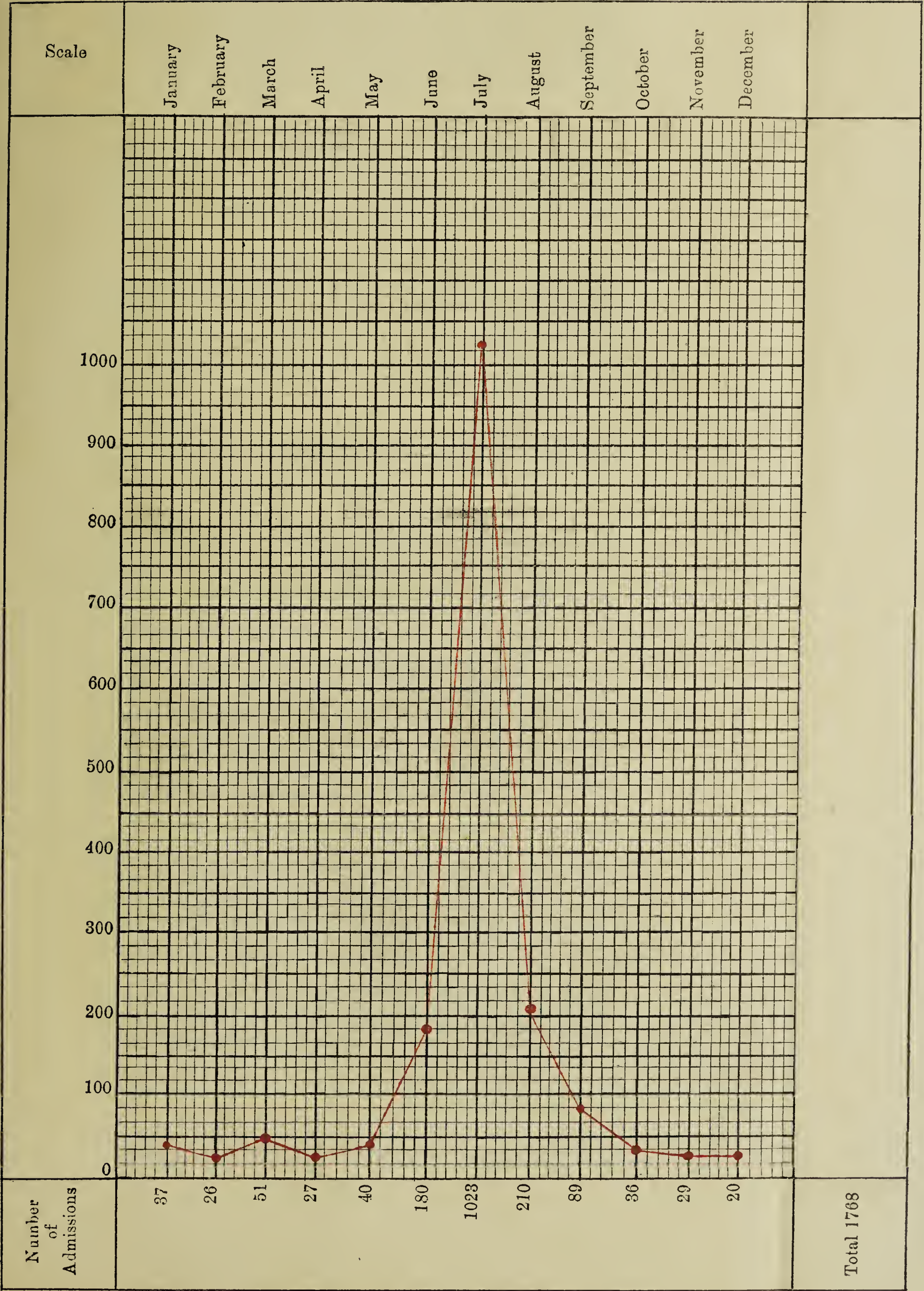
\* Coming from Rivière du Rempart.  
† Coming from Port Louis.

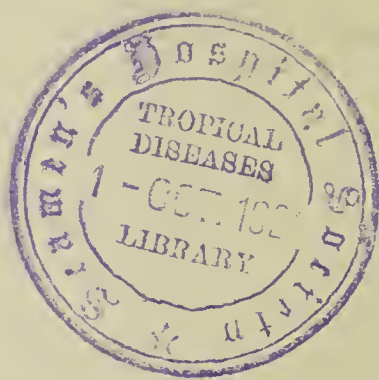
Chart I.



CHART I.

Chart showing the monthly number of admissions for Influenza during 1906.







to all the dispensaries and hospitals of the Island to supply cough mixtures free to those who applied for the same irrespective of their position and standing. In several localities the officer in charge of the dispensaries made house to house visits besides, while in a few remote ones, viz : Tamarin, Black River, Chamarel and Quatre Cocos, a stock of simple medicines was entrusted to the local schoolmasters for distribution to the sick.

The number of cases treated in the dispensaries for that complaint was 5,906 during the year under review against 3,645 for the year previous.

*Pneumonia* :—Under this heading 489 admissions took place against 368 during the previous year. The death-rate likewise rose from 32.4 o/o in 1905 to 35.5 during the year covered by this report. The increase in the incidence and case-mortality of this disease is apparently due to the epidemic of influenza above referred to.

*Beri-Beri* :—Only ten cases of that disease were treated, all at the Civil Hospital. One of these ended fatally. Seven of the patients were Chinese. The other sufferers were one Creole admitted on two occasions, and one Indian ; but the real cause of the neuritis in these two cases was somewhat obscure.

Instructive remarks on this affection will be found in the interesting report of Dr. L. E. de Chazal on the Civil hospital.—Vide Annexure VIII.

*Nephritis* :—The number of admissions for that complaint amounted to 285 which shows a decrease of 40 when compared with the figure of the previous year. The case-mortality has however risen from 21.5 o/o to 22.4 o/o.

*Measles* :—There was no admission for that complaint into the hospitals, but 61 cases with 2 deaths were notified during the year under review. This disease occurred among Indian immigrants who on their arrival in the Colony per S.S. "Sangola" were isolated at the Immigration Depot. The sick were subsequently segregated at the Grand River North West Lazaret and the disease did not spread.

*Scarlet Fever* :—One case was notified from one of the districts. Medical opinion was however divided as to the real nature of the disease. Scarlet fever has from time to time, and occasionally at long intervals, been observed in this Colony without it being possible after close enquiry to elicit satisfactory information as to the source of the complaint while the attacks have generally proved mild ; the cases remaining unique in a population apparently unprotected by previous outbreaks.

*Diabetes* :—There have been 57 admissions for diabetes mellitus against 29 for last year. The increase cannot be attributed solely to a better diagnosis. This factor undoubtedly plays an important part in respect of the figures which have yearly found their way in the statistical returns ; but there is also clear indication from clinical experience that the disease, owing to causes which cannot as yet be satisfactorily defined, is becoming more prevalent in the Colony.

*Syphilis* :—This disorder is unfortunately still on the increase in the Colony, the number of cases which came under notice during the year 1906 was 433 against 359, 352 and 368 during 1905, 1904 and 1903 respectively.

*Leprosy* :—Twenty cases were temporarily treated in the hospitals. From a statement kindly placed at the disposal of this Department by the Poor Law Commissioner, it appears that 190 patients were treated at the St. Lazare Asylum during 1906. Of these 149 were males and 41 females. Thirty-three left the institution during the year and the deaths numbered 21. The admissions as compared with 1905 show an increase of 21 while the number of deaths was greater by 3.

*Plague* :—Thirty admissions and 15 deaths took place in the Civil Hospital and none in the district hospitals. A full account of the incidence of the disease in the Colony during the year under review will be found in Chapter IV.

*Mental Diseases* :—Sixty-six patients were temporarily admitted into the General Hospitals for this cause, showing an increase of 23 over the number recorded last year.

Annexure IX.

As will be observed from the annexed report of the Superintendent of the Lunatic Asylum, there were 423 patients on the roll of that establishment at the close of the year under review ; this number being exclusive of one female patient who was then under observation on interim order. The total shows an increase of 12 on the number of the previous year. The average number of male patients in the Asylum was 248.10 and that of female patients 171.22.

Taking into account the patients confined in the Lunatic Asylum and the Lunatic Branch Wards of the Barkly Asylum as well as those out on probation, the number of insane is 1 in 632 of the population of the Colony.

*Pertussis* :—This disease which had only been reported in a sporadic form during a number of years began to prevail at the end of the year 1905 and assumed an epidemic character in 1906.

The number of cases admitted into hospital was 169. Of these 5 proved fatal, while 216 deaths were ascribed to it at the Civil Status during 1906, their monthly number being as follows :—

|           |     |     |     |     |
|-----------|-----|-----|-----|-----|
| January   | ... | ... | ... | 24  |
| February  | ... | ... | ... | 28  |
| March     | ... | ... | ... | 34  |
| April     | ... | ... | ... | 26  |
| May       | ... | ... | ... | 43  |
| June      | ... | ... | ... | 28  |
| July      | ... | ... | ... | 21  |
| August    | ... | ... | ... | 4   |
| September | ... | ... | ... | 3   |
| October   | ... | ... | ... | 3   |
| November  | ... | ... | ... | 1   |
| December  | ... | ... | ... | 1   |
| Total     |     |     |     | 216 |

The outbreak was of a severe character and, as will be observed, attained its highest in May, rapidly declining until December when it had almost completely subsided.

### III.—METEOROLOGICAL CONDITIONS OF THE SEASONS AND THEIR PROBABLE EFFECTS WITH REGARD TO SICKNESS.

Consideration of the meteorological conditions and their probable effects on disease cannot, as Dr. Barbeau said in last year's annual report on the work of this Department, but lead



to repetition of what has already been often mentioned.

From Annexure I (b) which has been kindly supplied by the Director of the Royal Alfred Observatory, it will be seen that the total rainfall for the year amounted to 41.66 inches against 67.905 for 1905 and an average of 49.15 inches for the 36 years preceding. So that on the whole the year has been a comparatively dry one. There is no doubt that the effect of this limited rainfall, beneficial as regards the health of the Colony with respect to malaria, might have been more felt had the rain been less evenly distributed.

The number of rainy days stands at 201 against 207 for 1905 and an average of 192 for 10 years.

Concurrently, the degree of humidity for 1906 stands at 75 o/o against 78.5 o/o for 1905; this fall was noted during every month of the year with the exception of February when there was an excess of 1.3 o/o, of July with an excess of .3 o/o and October with one of 1.2 o/o.

Again, during the earlier months of the year on the whole the temperature has been slightly higher than in 1905 while the velocity of the wind has ranged lower during the earlier months, a sharp increase occurring in May and July.

Therefore, with respect to malaria, the conditions acting in either sense on the incidence of the disease have been, generally, almost counterbalanced for, while the diminished rainfall and humidity and the slightly higher range of temperature during the earlier months were favourable as regards a diminution in its incidence, yet the fact that the wind velocity was less and the rainfall evenly distributed acted in the opposite direction.

The soil once wet remained so long, especially in sheltered places like river reserves and others where vegetation is so dense that the sun does not reach the surface of the ground and ventilation is absent. As on the whole the meteorological conditions have been more favourable than those which obtained in 1905, the incidence of malaria has been less marked.

Again, consideration of the temperature records for March, April and May showed that during the first two months mentioned the maximum was higher than the usual while the minimum was much lower so that the actual range was greater than that for 1905 by 6.6 degrees. From May to June further, the solar maximum fell from 149.4 to 138.0, the shade maximum from 84 to 79.1 and the shade minimum 57.4 to 53.5.

The wind during April, May and June was from the S. E. by E., a direction which in the latter month especially makes the effects of cold more noticeable.

Hence it is that the conditions which prevailed during these months were entirely favourable to the evolution of influenza and other pulmonary complaints the incidence of which fell to the usual figures when the atmospheric conditions became more temperate.

As there was no actual period of drought nor of abundant rainfall, dysentery and other allied diseases showed a consequent decrease in their incidence and the water supplies during the year gave rise to fewer complaints owing to the even distribution of the rain.

#### IV.--RECURRENCE OF PARTICULAR DISEASES.

*Malaria* :—Last year a statement was given in the report showing that the admissions for malaria had been the highest recorded since 1899, and attention was called to the fact that the epidemic had a tendency to recur every other year with enhanced virulence. The admissions for this year tend to support this observation as only 3,674 cases were admitted during



the year, against the exceptional high figures of the previous year. The following is a reproduction of the tabular statement of last year's report with the inclusion of the figures for 1906.

| Years.         | 1899  | 1900  | 1901  | 1902  | 1903  | 1904  | 1905  | 1906  |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|
| No. of cases.. | 4,152 | 2,848 | 4,182 | 3,360 | 4,788 | 3,039 | 5,123 | 3,674 |

Chart II gives the monthly number of admissions for malaria and the rainfall during the corresponding period. If taken in conjunction with the latter part of the similar chart in last year's report, it will be seen that the rainfall dropped from 8.55 ins. in December 1905 to 3.42 in January 1906 and reached its highest point in March; whilst the incidence of malaria which was 229 in December rose to 356 in January, reaching its acme in March with 528 cases.

From March the rainfall curve drops with some variations to 1.72 in September, and the incidence of malaria also decreases steadily from March to September without being influenced by the small variations in the rainfall, the two curves corresponding thereby pretty regularly, in agreement with previous experience.

Towards the close of the year under review the attention of this Department was directed to the prevalence of malaria at Phoenix which towards the end of December became severe especially in the marshy locality of Clairfond.

Phoenix, a village of about 1,854 inhabitants, had up to recent years been reputed as one of the healthy localities of the Island and, in spite of its numerous streams and springs, but few cases of malarial fever had come to the notice of the District Medical Practitioners.

The cause of the outbreak still remains obscure although reference cannot but be made to the possibility of malaria having spread into the village from the camp of native soldiers which is within a very short distance from it.

Up to the end of the year under review there were in Mauritius two battalions of native infantry with their usual train of camp followers stationing in turns, one at Port Louis, on the Citadel and at the Line Barracks, and the other at Phoenix.

During 1905 and 1906 the military authorities had called the attention of this Department to the fact that the men on the Citadel and at the Line Barracks were attacked with fever and applied for certain works, some of which were carried out by the Municipal Corporation at the instance of this Department while the remaining could not be attended to under the existing conditions.

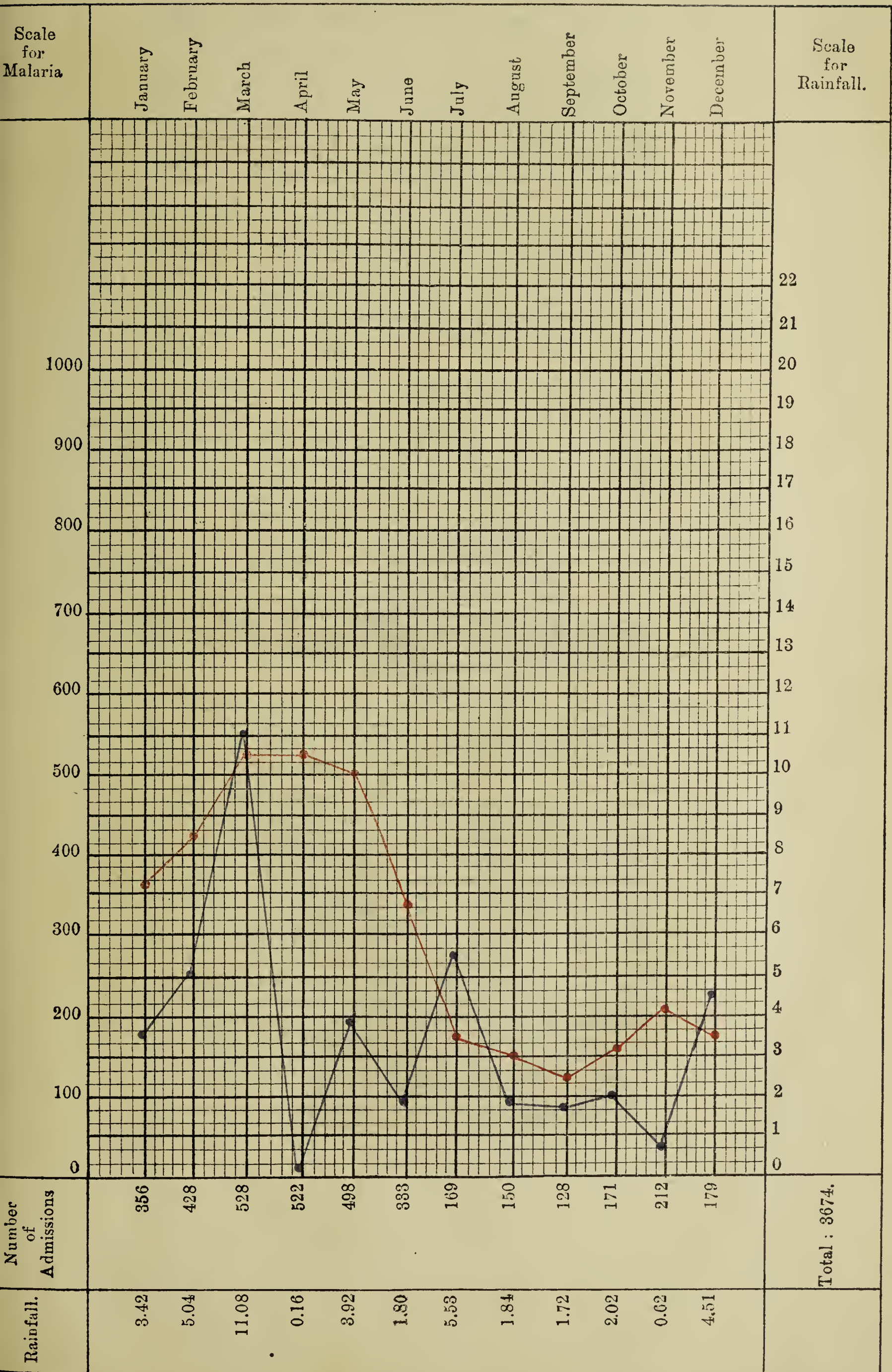
The repeated transfers above alluded to thus kept a constant source of infecting material in the close vicinity of Phoenix village which, it must be remembered, is also principally inhabited by natives.

Unfortunately these people mostly reside in defective huts and houses, ill constructed, on badly drained ground where the conditions of unhealthiness are aggravated by the interference with proper ventilation arising from thick growth reaching in many cases quite close to the buildings. Sanitary improvements cannot be carried out in such localities as rapidly as is desirable owing to a number of obstacles among which the prejudices arising from ignorance and customs and the difficulty for the sanitarian of interfering with vested rights are not the least. It may be easily conceived how this constant accession



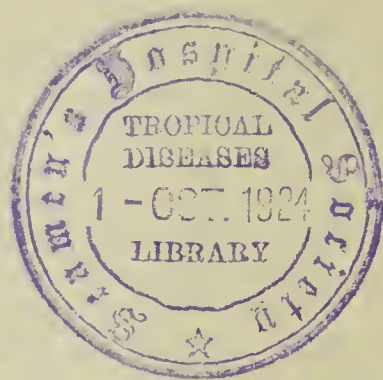
# CHART II.

Chart showing the monthly number of admissions for Malaria as well as the monthly Rainfall during 1906.



Admissions —————

Rainfall —————





of malarial germs from Port Louis, favoured by the conditions already existing, rapidly led to the contamination of the whole locality.

The clinical features of the outbreak are those usually associated with malaria although one cannot but be struck by the rapid and marked hypertrophy of the spleen which sets in and the intense anaemia which quickly follows making it questionable whether there is not, besides malaria, another disease aggravating it. A possibility of ankylostomiasis existing has been noted, but searches in that direction have hitherto proved fruitless, while the occurrence of Kala Azar imported from India could not be ignored and is under investigation.

Besides the general measures of sanitation followed under similar circumstances, the reserves of Plaines Wilhems River running along the main road through Phoenix have been cleared of all the undergrowth, while lately, at the recommendation of the Malaria Committee, Government has approved of certain works being carried out at Clairfond and Phoenix with a view to drain the numerous marshes and to regulate the streams of the locality.

*Dysentery* :—The relation between the prevalence of rain and of dysentery is shown in Chart III and the similarity in the variations of each comes out very strikingly, each increase or decrease in the rainfall being followed within a month by a corresponding increase or decrease in the incidence of dysentery. This tends to show the part played by the quality of water in the causation of the disease as the endemic acquires renewed virulence whenever heavy rains have washed down to the streams the filth of the adjoining country and the fertilizers frequently made with human excreta ; especially as the canes are manured at that time.

Chart IV.

*Tuberculosis* :—The accompanying chart shows that the worst periods of the year under review were March to April and July to September coinciding apparently with the wet and cold seasons, the highest wave coinciding with the influenza epidemic in July.

The mortality wave bears however no relation to the number of patients admitted as might be expected from the circumstances which attend the admission and the termination in that generally more or less chronic disease. The mortality tracing has therefore been omitted from the chart.

Chart V.

*Bronchitis* :—The annexed chart shows the curve of the disease during 1906. As will be observed by referring to the rainfall and temperature records, the incidence of the malady increased during the wet months of the summer and the cold months of the winter seasons. The fact that the highest wave of bronchitis in winter occurred in June may to a certain extent be considered as having been premonitory to the very brisk epidemic of influenza in July, many of the early cases recorded as bronchitis being probably cases of mild influenza.

*Plague* :—The epidemic of 1905 came to an end on the 11th. February 1906. Two sporadic cases only were detected on the 15th. of March, bringing up to 15 the total number of cases from the first January to that date. The Colony remained free from human plague until the 13th. July, the longest period of quiescence recorded since the appearance of the disease in the Island in 1899. The recurrence was brought to notice by the admission of a patient who was left by his friends in a moribund condition

at the gate of the Civil Hospital at the latter date. Persistent enquiries succeeded after about a fortnight in showing that the patient had resided in Corderie Street where it was further discovered that rats had been dying on the same premises for some time and where the second case was detected actually ill. Two more cases followed during that month in town. Eighteen occurred in August and the epidemic attained its height with 151 cases in November.

The total number of cases for the year was 434 of which 344 died giving a death-rate of 79.3 o/o.

The districts of Flacq, Grand Port and Black River escaped infection altogether while a few cases only, all traceable to Port Louis, occurred in Pamplemousses, Rivière du Rempart and Savanne. One case on its way from town to Moka was stopped at Pailles in the latter district.

Two indigenous foci only apparently persist in this Island from those of the previous epidemics one at Port Louis and the other in the township of Rose Hill and Beau Bassin.

Annexure V shows in a tabular form the incidence of the disease in each year during the epidemic and quiescent periods of its existence in Mauritius, while Annexure IV shows the monthly incidence in each of the districts during the year under review.

As in former years the epidemic was preceded and accompanied by an epizootic among rats. This fact and close observations made during the progress of the epidemic, once more indicate that these rodents are the main if not the exclusive agents in the propagation of the disease in this Colony.

The means adopted to destroy the vermin as well as all the important details of the work done in connection with the outbreak of plague will be found in a separate report from Dr. Blackburn, the Plague Authority, whose untiring energy in this direction has met with a not inconsiderable amount of success seeing that 72,962 rats were killed in town alone, while the total number destroyed by the departmental rat-catchers in the whole Colony came up to 105,568. This figure does not include the rats systematically destroyed on sugar estates.

One hundred and sixty-eight patients were treated at Bois Savon Lazaret and two at the Souillac Lazaret. For the second time in seven years an attendant on the sick apparently contracted the disease in a Lazaret.

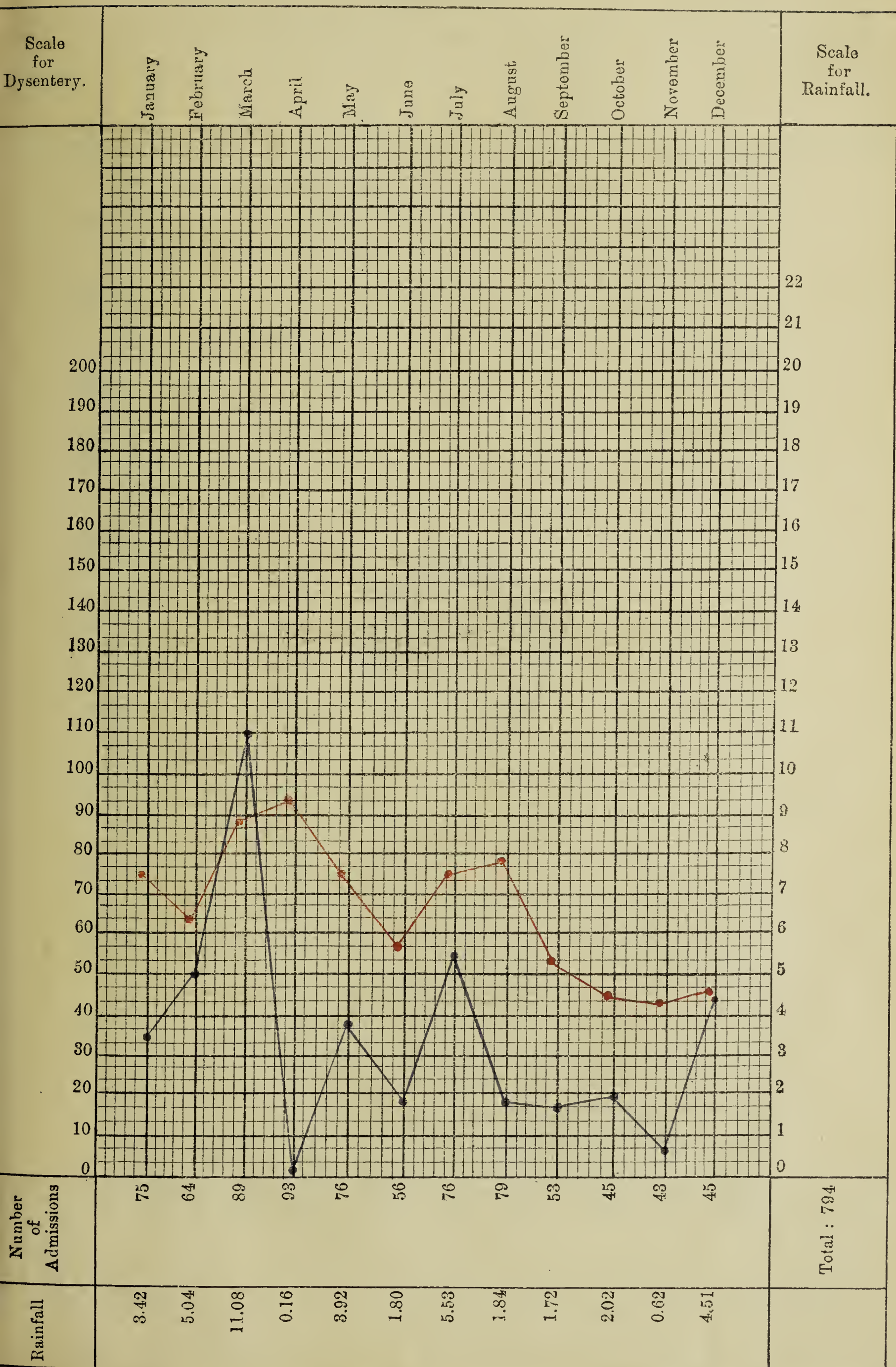
On the first occasion in 1903 a washerman contracted plague it was supposed through the careless handling of some infected clothing. He fortunately recovered. This time the disease terminated fatally. The victim was a female nurse who had been attending at the Lazaret several patients admitted in very poor condition and in a very filthy state covered as they were with vermin. It is true that the nurse had been attending a private plague patient in a contaminated locality previous to the resumption of her duties at the Lazaret, but the time spent between the severance of her connexion with this private patient and the detection of the first symptoms make it unlikely that the infection occurred at the latter's house.

As observed in previous reports, seasonal variations have had little direct influence on the disease. The absence of cyclones, heavy rains and floods which apparently destroy a large number of rodents may indirectly have favoured the spread of the epizootic of plague among rats and a concurrent higher incidence of the disease on man last year, in town especially where the existence of numerous drains in a bad state of repairs, some inaccessible, and of houses in dilapidated condition constitutes a serious



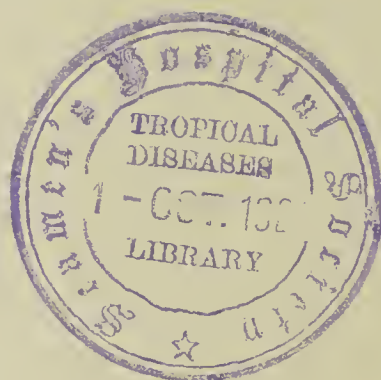
# CHART III.

Chart showing the monthly number of  
admissions for Dysentery  
during 1906.



Dysentery

Rainfall





# CHART IV.

Chart showing the monthly number of  
admissions for Tuberculosis  
during 1906.

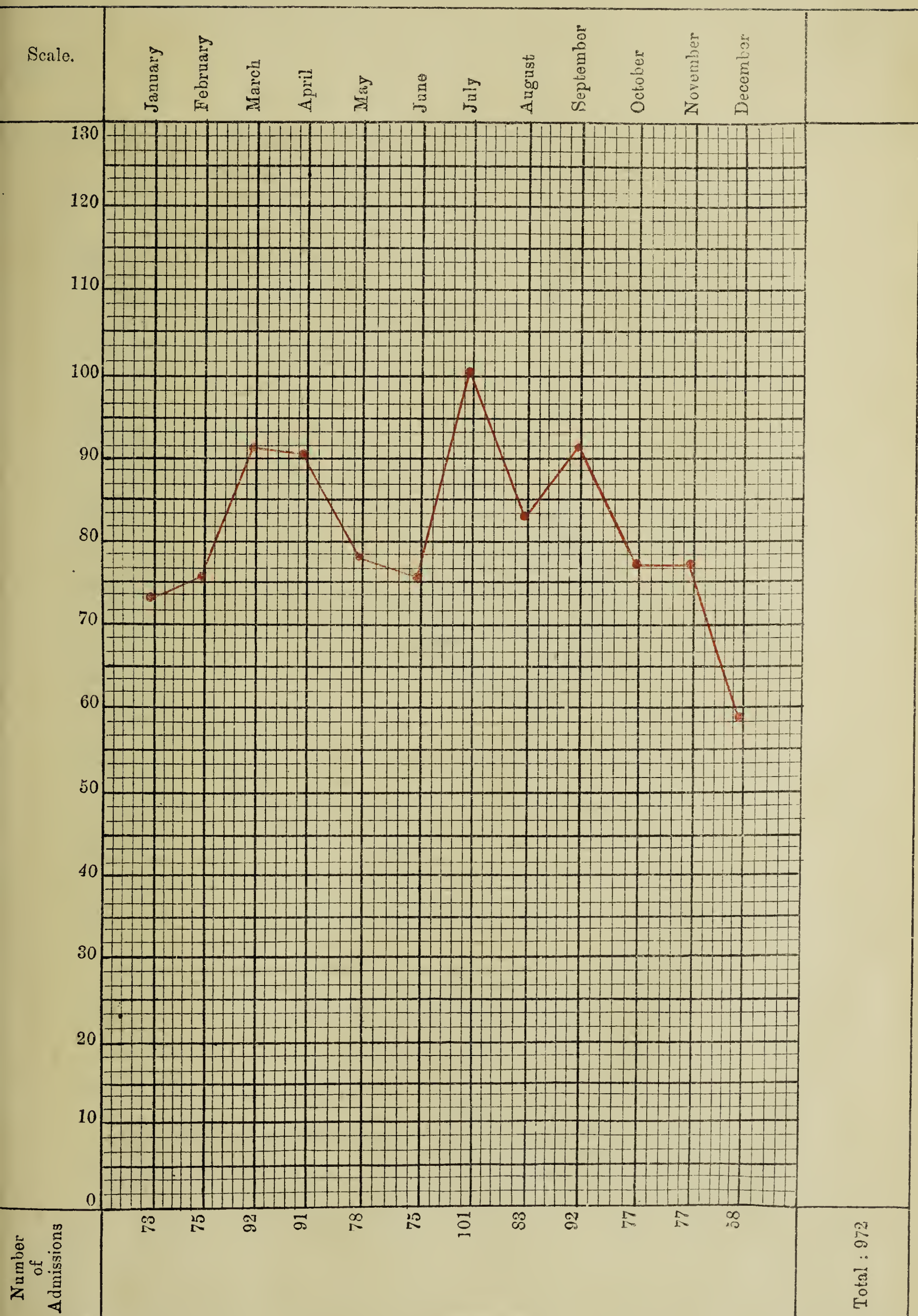
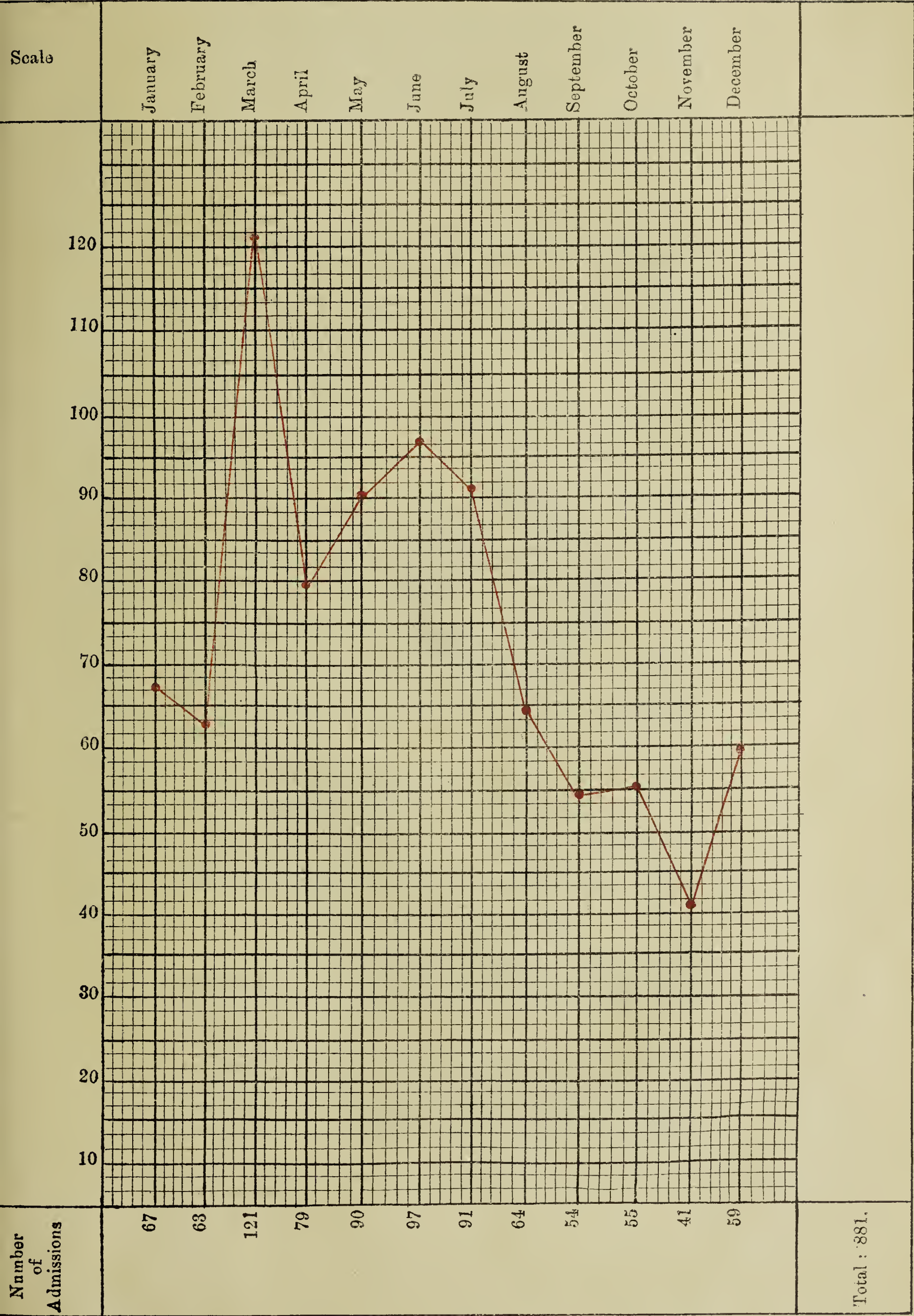






CHART V.

Chart showing the monthly number of admissions for Bronchitis during 1906.







obstacle to measures of sanitation, disinfection and rat destruction.

*Surra* :—The disease has prevailed throughout the year but to a lesser extent than during the previous ones. A rapid decline in the epizootic took place after the month of March and the virulence of the disease appeared to be diminished.

The new methods of treatment by atoxyl and substances of the Benzidine series have been tried mostly in the case of equines. No definite opinion can as yet be expressed on their curative value.

## V.—VACCINATION.

The number of children vaccinated in the course of the year 1906 was 9,767 whilst 11,501 had been vaccinated in 1905 and 10,524 in 1904. The marked reduction in the number of vaccinated children may be attributed to two causes, viz : 1o. the small-pox epidemic in the preceding year which had favoured the early vaccination of infants and reduced thereby the balance of unvaccinated children from 1905 ; 2o. the slight decrease in the birth-rate of 1905 which was still more marked in 1906, when the birth-rate fell to 33.5 per thousand.

The proportion of children vaccinated by the Government officials compared with the number of births in the year is 77.09 o/o ; but as these figures are calculated on the number of births registered and do not take into account the large number of infants that have died before being vaccinated nor the number of children vaccinated by private practitioners, the proportion of children who actually escape vaccination altogether can be but very small, as, moreover, a return of the children of the age of ten months who have not yet been reported to the Civil Status Officers as having been vaccinated is forwarded to and acted upon by the Police in accordance with Ordinance No. 12 of 1875.

The number of children reported as insusceptible to successful vaccination was 79. This number is much greater than should be actually the case and the fact is due to certificates of insusceptibility under Schedule C of the abovementioned Ordinance having been issued in two districts after the third unsuccessful vaccination without a further attempt having been made to vaccinate the children with lymph of proved efficacy under more favourable conditions.

The proportion of success was 99.2 % on the total number of vaccinated children after deducting fourteen children in whose case the result of the operation could not be ascertained.

Besides the above, the crew and passengers of 12 vessels coming from ports where small-pox existed at the time of their departure, were vaccinated. It has been impossible for obvious reasons to ascertain the results in most of these cases.

## VI.—SANITARY ADMINISTRATION.

The work done by the staff of Sanitary Inspectors and guards is shown in the customary tabular form in Annexures VI and VII. Port Louis is dealt with by itself and all the other districts are considered together.

*Port Louis* :—During the year under report the sanitary officers visited private premises and lodging houses on 13,395 and 133 occasions respectively. Besides the above, 2,065 visits were made in connexion with shops, markets, bake houses, slaughter houses and butchers' shops. The staff had to perform special

duties, carry out enquiries and attend cremations, exhumations, &c., on 5,707 occasions.

The performance of the night soil service of the town was controlled on 1,288 occasions, and stables, cowsheds and pigstyes both in town and in the extra urban part of the district were the object of 2,403 visits. To Government establishments, public and gratuitous private latrines, cemeteries, noxious factories, camps, water courses and lavatories 2,232 visits were paid.

During the year covered by this report quarantine duty amounted to a total of 7 days' work, while the sanitary officers attended Court on 257 occasions. The difference in the number of days of quarantine duty from that of last year is due to the fact that the sanitary inspectors and guards were told off for such duty only when the specially trained disinfectors attached to the disinfecting branch of the Department were not available. This course has been resorted to in order to interfere as little as possible with the regular duties of the sanitary inspectors and guards.

The total number of contraventions of the various Sanitary Regulations detected amounted to 2,372 and out of these 276 had not been finally dealt with at the end of the year.

Although the scavengering service and the general care of the urban area of Port Louis showed some improvement during the year under review, still, numerous representations had to be made by this Department concerning the neglected state of streets, streams and gutters in several parts of the town. The Municipality was, under the provisions of Ordinance No. 23 of 1903, requested on 690 occasions to abate nuisances detected and 455 of these were attended to before the end of the year. Besides 74 other public nuisances were reported for abatement and 1,971 notices were served for the removal of private ones.

In compliance with the provisions of the Swine Destruction Ordinance, 219 stray pigs were destroyed during the year, but these animals have nevertheless continued to be often a source of serious nuisance.

The scavengering service of the extra urban area has been attended to by means of a gang of labourers and two carts employed by this Department, extra assistance being occasionally given when required.

The night soil service of the greater part of the town of Port Louis has continued, as in the past, to be performed by means of carts, being in striking contrast to the water carriage system which is now at work in a most satisfactory manner in an as yet unfortunately too limited part of the town.

There has been no alteration in the water supply of Port Louis which, as already mentioned in previous reports, cannot be considered satisfactory and is very much exposed to pollution.

In addition to the works mentioned in the report for 1905 in connection with the water carriage system, 6 premises have been drained and 8 water closets erected in district No. 4 during the course of the year under review. In that same period, 12,200 feet of sewers have been laid in district No. 2 and 6 water closets have been provided in district No. 3. The house drainage has not yet been started in district No. 2.

As in 1905 the sanitary authority for Port Louis has continued as part of the duties of his appointment to inspect common lodging houses and insanitary premises in the town and district, and 1,238 orders under Ordinance No. 21 of 1900 were issued by him. The greatest difficulty has frequently been met with in obtaining compliance with these orders, owing in not a few instances to the utter inability of the owners of premises to find sufficient means to carry out the desired works. The condition of



many buildings in Port Louis is on that account a great obstacle to elementary sanitation.

The control of the milk trade has continued to receive the careful attention of the sanitary staff during the year ; they tested the milk sold in Port Louis on 923 occasions and, as usual, samples of suspected milk were submitted for examination by the Government Analyst when the opinion of the examining officers was contested by the milk sellers or when there was reason to fear that the results obtained were unreliable.

*Rural Districts :—*The usual statement of sanitary contraventions, collections, fines, &c., in the rural districts during the year is shown in Annexure VII.

The number of contraventions was 1,563. In 1,370 cases, prosecution had to be resorted to and the fines amounted to Rs. 3,545.96. Out of 7,208 notices served for the abatement of nuisances, 559 had not been complied with at the close of the year ; 347 persons were prosecuted for non compliance with notices and the fines imposed on them by the Magistrates amounted to Rs. 710.55.

The collections yielded by the markets and cemeteries under the management of this Department amounted to Rs. 23,935.30.

A total number of 5,982 animals was killed in the four public Abattoirs under the charge of this Department and the fees collected therein amounted to Rs. 2,456.50.

The general upkeep of estate camps, excepting a few well managed ones, has not been as satisfactory as it should, and has again on a number of occasions given rise to repeated criticism.

The presence of loose animals in certain camps has again been a source of serious nuisance and the difficulties met with in trying to deal with this contravention have remained as important as already pointed out.

The difficulties in connection with the use of latrines by the labourers on estates and the ignorant population in villages have greatly interfered with the sanitation of these agglomerations of population, and, besides giving rise to ill-health in various forms, explain the spread of ankylostomiasis, the prevalence of which is becoming more and more evident.

The following is a list of the establishments falling within the classification of noxious factories which have been authorised during the year :—

|                          |     |     |    |
|--------------------------|-----|-----|----|
| Bambara Curing Factories | ... | ... | 11 |
| Lime Kilns               | ... | ... | 4  |
| Manure Factory           | ... | ... | 1  |
| Aloe Fibre Factories     | ... | ... | 5  |
| Distillery               | ... | ... | 1  |

*Water Supply:—*The complaints in connection with the pollution of rivers by sugar factories have been again drawing attention to the very unsatisfactory water supply of most of the localities of the Colony, but the Mare-aux-Vacoas water supply has given rise to fewer complaints of bad smell which had been an unpleasant feature of that otherwise purer source of drinking water.

While it is an agreeable duty to recognize and record the praiseworthy efforts made by some District Boards under Ordinance No. 35 of 1902 to ameliorate certain water supplies, it cannot be concealed that the task before them is still of very considerable magnitude and it is imperative that attention be called to the fact that the actual and possible dangers to which the population is exposed from water borne diseases exist to an alarming extent.

BUILDING BRANCH AND SANITARY ENGINEER'S SECTION.

The following is a summary of the work done in that Section of the Department under the charge of the Sanitary Engineer :—

One thousand three hundred and fifty feet of 5" and 6" earthenware pipes were laid for the drainage of the refuse water at the Lunatic Asylum. Six manholes and the necessary connections with the bathrooms and lavatories were constructed in the course of that work and a mosquito proof storage reservoir was also built in the gardens of the Institution.

At Grand River North West, 500 feet of underground pipes were laid for the disposal of the waste waters of a fountain and certain private premises, which caused serious nuisances in that locality and which could not have been abated by means of superficial drainage without incurring a much larger expenditure.

Six hundred feet of superficial drains were constructed at Abattoir Road, Roche Bois, to dispose of the surface waters from the road and waste waters from the premises, which had been the cause of a serious and long standing nuisance in the locality.

One thousand one hundred feet of surface drains were also constructed to carry away the refuse waters from premises as well as the surface waters from certain roads at Mahebourg where the stagnation of the same was a danger to the public health.

The following statement shows the number of permits issued for new constructions in each of the districts of the Colony :—

| Districts.                        | Villages. | Other Places. | Total. |
|-----------------------------------|-----------|---------------|--------|
| Port Louis (extra urban area) ... | ...       | 107           | 107    |
| Pamplemousses ...                 | 92        | 82            | 174    |
| Riv. du Rempart ...               | 50        | 31            | 81     |
| Flacq ...                         | 79        | 79            | 158    |
| Grand Port ...                    | 202       | 76            | 278    |
| Savanne ...                       | 62        | 59            | 121    |
| Plaines Wilhems ...               | 120       | 99            | 219    |
| Moka ...                          | 93        | 43            | 136    |
| Black River ...                   | 40        | 14            | 54     |
| Total ...                         | 738       | 590           | 1,328  |

Two hundred and fifty one permits, as under, were delivered on account of extensive repairs to buildings and huts :—

|                                |     |     |     |
|--------------------------------|-----|-----|-----|
| Port Louis, extra urban area } | ... | ... | 30  |
| Pamplemousses                  | ... | ... | 21  |
| Riv. du Rempart                | ... | ... | 11  |
| Flacq ...                      | ... | ... | 17  |
| Grand Port ...                 | ... | ... | 70  |
| Savanne ...                    | ... | ... | 41  |
| Plaines Wilhems                | ... | ... | 30  |
| Moka ...                       | ... | ... | 15  |
| Black River ...                | ... | ... | 16  |
| Total                          | ... | ... | 251 |



while 15 special permits were issued in addition on account of the reduction of frontage distance, &c.

Two dead houses were erected during the year under review in the cemeteries of Flacq Point and Downs, and a boatman's hut was built on the grounds of the first named cemetery.

General repairs were carried out at Rose Hill and Curepipe markets, Lower Plaines Wilhems and Pailles Cemetery buildings ; Keepers' quarters at Souillac and Flic-en-Flac Cemeteries, Public Latrines at Mahebourg and Abercrombie, while the boiler brick work of Rose Hill Abattoir was partly reconstructed. In addition, the Pailles Cemetery buildings and the Rose Hill and Beau Bassin markets were thoroughly painted.

The Sanitary Engineer also planned and supervised the drainage works at Rose Hill Abattoir for the disposal of the washings and other refuse waters and the important operations at Mon Plaisir marsh referred to in the Chapter on anti-malarial campaign.

## VII.—HOSPITALS, ASYLUMS AND DISPENSARIES.

The only change which has taken place in the course of the year in the Hospital arrangements of the Colony was the opening of a small hospital at the Flacq Prisons in connection with the reopening of that jail in June. The number of Hospitals and Asylums is therefore 14 including the Prisons Hospital opened the preceding year at Souillac.

The following table supplies the usual statistical information concerning the patients treated in these 14 institutions :—

| Institutions.                    | Remaining<br>at end of<br>1905. | Ad-<br>missions. | Deaths. | Total<br>cases<br>treated. | Remaining<br>at end of<br>1906. |
|----------------------------------|---------------------------------|------------------|---------|----------------------------|---------------------------------|
| Civil Hospital ...               | 168                             | 5,784            | 404     | 5,952                      | 125                             |
| Port Louis Prisons Hospital ...  | 18                              | 898              | 6       | 916                        | 12                              |
| Long Mountain Hospital ...       | 15                              | 644              | 62      | 659                        | 10                              |
| Poudre d'Or Hospital ...         | 25                              | 1,385            | 73      | 1,410                      | 28                              |
| Flacq Hospital ...               | 37                              | 2,045            | 133     | 2,082                      | 25                              |
| Flacq Prisons Hospital ...       | ...                             | 77               | 1       | 77                         | 9                               |
| Mahebourg Hospital ...           | 26                              | 2,218            | 90      | 2,244                      | 39                              |
| Savanne Hospital ...             | 27                              | 1,102            | 62      | 1,129                      | 19                              |
| Savanne Prisons Hospital ...     | 10                              | 280              | 2       | 290                        | 6                               |
| Barkly Asylum Hospital ...       | 104                             | 3,518            | 282     | 3,622                      | 84                              |
| Lunatic Asylum Hospital ...      | 24                              | 441              | 30      | 465                        | 24                              |
| Beau Bassin Prisons Hospital ... | 15                              | 996              | 29      | 1,011                      | 18                              |
| Reformatory Hospital ...         | ...                             | 79               | 1       | 79                         | ...                             |
| Moka Hospital ...                | 13                              | 904              | 46      | 917                        | 5                               |
| Total                            | 482                             | 20,371           | 1,221   | 20,853                     | 404                             |

The number of Dispensaries has remained the same, viz : 14 fixed and 14 extra, making a total of 28. The total number of cases treated amounted to 56,354 and 1,572 operations were performed.

Compared with the figures of the preceding year there was a decrease of 3,046 cases treated as already observed.

## VIII.—MISCELLANEOUS.

*Port and Quarantine Work* :—The Health Officer boarded 260 vessels during the year under review of which 183 were admitted to pratique at once.

Twenty-eight steamers refused pratique although entitled to it and performed their coaling and other operations in quarantine.

Twenty-seven vessels were detained for a few hours only as a rule for the purpose of disinfection of the clothes and effects of the deck passengers and native crew as well as the parts of the vessel used by them.

Three steamers were placed in quarantine for a few days in addition to disinfection on account of the occurrence on board of small-pox, while 19 others were kept isolated for varying periods to complete the duration of quarantine imposed by law for the disease which existed at their port of departure.

In the course of the year the disinfecting station, besides being utilized twelve times for the outgoing passengers leaving by the French Mail, was used on several occasions for the disinfection of incoming passengers from eastern ports with very satisfactory results as regards thoroughness and speediness of work.

Cannoniers' Point was occupied three times for the accommodation of passengers quarantined on account of small-pox. On two occasions the isolation was for observation of 4 and 5 days respectively to complete the period of 15 days, and once for the segregation of a small-pox patient as well as the passengers of the S.S. "Itola". The quarantine in this case lasted 32 days.

Flat Island Quarantine Station was not made use of during the year.

*Anti-Malarial Campaign* :—During the year 1906, the funds available for measures to be taken to combat malaria were on the advice of the Malaria Committee, employed in the completion of the cleaning and draining of the Mon Plaisir Pond, which had been started in the preceding year.

A masonry channel 900 ft. long has been constructed to divert the waters from the marsh while discharge trenches are being made to completely drain the hollows which remained in the exposed surface.

Considerable benefit to the inhabitants of Pamplémousses will, it is hoped, follow the operation, as the marsh, situated on the outskirts of the Royal Botanical Gardens, was at a short distance only from the centre of the village which is thus being rid of a notorious mosquito breeding place.

From the funds provided for Minor Sanitary Works, canals were cleaned and trenches opened in various places while cleaning operations were carried on in River du Mesnil at Curepipe and in Rivers Belle Isle and Dragon at Black River.

The distribution of quinine during the summer months was carried out as in previous years in malarious localities through the agency of thirty-six Schoolmasters who receive a small remuneration for the work and are entrusted with the free issue of the specific to the poor or at almost cost price to those who can afford to pay for the same.

*Laboratory work* :—The work done by the Government Analyst is described in Dr. Paddle's report hereto annexed (Annexure XIII).

Bacteriological and microscopical researches have been, as in the last few years, conducted in the small laboratory attached to the Civil Hospital under the care of Mr. Maya and have



proved very useful to the public and the members of the medical profession.

A summary of that work for the year under review will be found on page 56 of the report on the Civil Hospital (Annexure VIII).

*Legislation* :—Four Ordinances affecting the Medical and Health Department were passed during the year under review.

The first one, No. 15 of 1906, modifying Ordinance No. 24 of 1901 was enacted with a view to facilitate the boarding, inspection and where necessary the disinfection of vessels liable to that measure and also the issue of certificates of clearance to outgoing vessels when the sanitary state of the Colony requires that a medical inspection should be made before their departure.

The second Ordinance, No. 20, had for its object the reorganisation of the medical staff in the districts, and, when in full force, will considerably ameliorate the previously existing arrangements.

The third law, No. 21, was enacted with a view to regulate the practice of dentistry which so far could be almost freely engaged into by any one considering himself qualified for the work.

The last, Ordinance No. 23, was mainly a consolidating ordinance codifying the previously existing laws in respect of the care and treatment of Lunatics.

Regulations 283, 212, 75 and 294 prohibiting the washing of clothes, &c., in rivers at certain points where the water is taken for alimentary purposes, were also enacted.

*Departmental* :—I was absent on leave to Europe during the first eight months of the year and Dr. Barbeau, Assistant Director, had charge of this Department. It is with much pleasure that I bear testimony to the manner in which he acted and the success of his administration. In consequence of this change Dr. Momplé acted as Assistant Director and Dr. Gromitt as 1st. Sanitary Warden while Dr. Keisler acted as Assistant Sanitary Warden.

Dr. Portal, Government Medical Officer of Grand Port having applied for leave in October, Dr. Gromitt was appointed to act for him and Dr. Keisler again assumed charge of the sanitary duties in Port Louis.

Among the changes in the subordinate staff I should mention the retirement on pension of 1st. class Sanitary Inspector T. Ware who had been for 26 years an exemplary Sanitary Officer.

15th. June, 1907.

H. LORANS,

M.B., D.P.H., EDIN.

Director.

## ANNEXURE I.

(a)

## RETURN OF THE STATISTICS OF POPULATION FOR THE YEAR 1906.

|                                   |     | Europeans,<br>Whites, Mixed &<br>Coloured. | Africans. | Indians. | Chinese. | Total.  |
|-----------------------------------|-----|--------------------------------------------|-----------|----------|----------|---------|
| Number of inhabitants on 31.12.05 | ... | 104,946                                    | 2,397     | 264,667  | 5,522    | 377,532 |
| „ Births during the year 1906     | ... | 3,799                                      | ...       | 8,870    | ...      | 12,669  |
| „ Deaths „ „ 1906                 | ... | 4,127                                      | 21        | 10,829   | 141      | 15,118  |
| „ Immigrants „ 1906               | ... | 1,822                                      | ...       | 1,869    | 835      | 4,526   |
| „ Emigrants „ 1906                | ... | 1,556                                      | ...       | 2,005    | 648      | 4,209   |
| Number of inhabitants on 31.12.06 | ... | 104,884                                    | 2,376     | 262,572  | 5,568    | 375,400 |
| Increase or                       | ... | ...                                        | ...       | ...      | 46       | ...     |
| Decrease                          | ... | 62                                         | 21        | 2,095    | ...      | 2,132   |

(b)

## METEOROLOGICAL RETURN FOR THE YEAR 1906.

| MONTHS.         | TEMPERATURE.      |                      |                   |                   |        |       | RAIN-<br>FALL.       | Degree of<br>Humidity. | WINDS.                |                           | NORMALS.               |                              |
|-----------------|-------------------|----------------------|-------------------|-------------------|--------|-------|----------------------|------------------------|-----------------------|---------------------------|------------------------|------------------------------|
|                 | Solar<br>Maximum. | Minimum on<br>Grass. | Shade<br>Maximum. | Shade<br>Minimum. | Range. | Mean. | Amount in<br>Inches. |                        | General<br>Direction. | Average<br>Force.         | Rainfall<br>36 years.  | Wind Velo-<br>city 31 years. |
| January ....    | 152.1             | 58.9                 | 89.6              | 65.7              | 23.9   | 78.6  | 3.42                 | p. c.<br>75.6          | E.b.S.                | Miles<br>per hour.<br>9.9 | ins.<br>7.78           | Miles<br>per hour.<br>11.1   |
| February ....   | 160.4             | 65.3                 | 90.1              | 71.4              | 18.7   | 79.9  | 5.04                 | 81.3                   | E.b.N.                | 6.8                       | 7.24                   | 11.0                         |
| March ....      | 157.2             | 64.6                 | 88.5              | 69.7              | 18.8   | 78.6  | 11.08                | 84.7                   | East                  | 7.3                       | 9.22                   | 10.4                         |
| April ....      | 151.0             | 51.3                 | 87.9              | 61.5              | 26.4   | 75.5  | 0.16                 | 74.5                   | S.E.b.E.              | 8.6                       | 4.96                   | 10.5                         |
| May ....        | 149.4             | 47.6                 | 84.0              | 57.4              | 26.6   | 72.1  | 3.92                 | 76.3                   | S.E.b.E.              | 10.3                      | 3.69                   | 10.3                         |
| June ....       | 138.0             | 46.4                 | 79.1              | 53.5              | 25.6   | 68.4  | 1.80                 | 74.5                   | S.E.b.E.              | 9.4                       | 2.06                   | 11.2                         |
| July ....       | 136.9             | 47.7                 | 76.8              | 55.1              | 21.7   | 67.8  | 5.53                 | 76.9                   | E.S.E.                | 11.9                      | 2.28                   | 12.0                         |
| August ....     | 139.7             | 43.9                 | 77.4              | 51.6              | 25.8   | 67.6  | 1.84                 | 74.2                   | S.E.b.E.              | 9.9                       | 2.24                   | 12.3                         |
| September ....  | 148.7             | 46.3                 | 79.9              | 54.1              | 25.8   | 67.7  | 1.72                 | 72.5                   | S.E.b.E.              | 10.4                      | 1.40                   | 12.0                         |
| October ...     | 147.7             | 52.0                 | 83.6              | 61.1              | 22.5   | 71.2  | 2.02                 | 73.2                   | E.b.S.                | 9.7                       | 1.59                   | 11.0                         |
| November ....   | 148.1             | 54.4                 | 88.1              | 61.0              | 26.1   | 73.2  | 0.62                 | 67.1                   | E.b.S.                | 8.7                       | 1.80                   | 10.7                         |
| December ....   | 152.5             | 57.1                 | 88.9              | 65.1              | 23.8   | 76.3  | 4.51                 | 68.8                   | E.b.S.                | 10.0                      | 4.89                   | 10.8                         |
| For the year .. | 160.4             | 43.9                 | 90.1              | 51.6              | 26.6   | 73.1  | 41.66                | 75.0                   | E.S.E.                | 9.4                       | 49.15                  | 11.1                         |
|                 | Feb. 21           | Aug. 15              | Feb. 8            | Aug. 15           |        |       | 2.96<br>Mch. 7       |                        |                       |                           | 17.34 on<br>Feb. 20.96 |                              |



## ANNEXURE II.

ANNUAL RETURN  
OF  
DISEASES AND DEATHS, &c.,  
DURING THE YEAR 1906.

---

*HOSPITALS :—*

1. Civil Hospital.
  2. Port Louis Prisons Hospital.
  3. Long Mountain „
  4. Poudre d'Or „
  5. Flacq „
  6. Flacq Prisons „
  7. Mahebourg „
  8. Savanne „
  9. Savanne Prisons „
  10. Barkly Asylum „
  11. Lunatic Asylum „
  12. Beau Bassin Prisons Hospital.
  13. Reformatory Hospital.
  14. Moka Hospital.
-

| Diseases.         | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end<br>of 1906. | Remarks. |
|-------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                   |                                 | Ad-<br>missions. | Deaths. |                            |                                      |          |
| ( Small Pox       | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Chicken Pox       | ...                             | 3                | ...     | 3                          | ...                                  |          |
| Measles           | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Scarlet Fever     | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Dengue            | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Cholera           | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Yellow Fever      | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Beriberi          | ...                             | 10               | 1       | 10                         | 3                                    |          |
| Yaws              | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Influenza         | 6                               | 1,768            | 80      | 1,774                      | 5                                    |          |
| Diphtheria        | ...                             | 7                | 3       | 7                          | ...                                  |          |
| Febricula         | ...                             | 8                | ...     | 8                          | ...                                  |          |
| Enteric Fever     | ...                             | 6                | 1       | 6                          | ...                                  |          |
| Dysentery         | 17                              | 794              | 121     | 811                        | 11                                   |          |
| Plague            | ...                             | 30               | 15      | 30                         | ...                                  |          |
| Malarial Fever :— |                                 |                  |         |                            |                                      |          |
| (a) Intermittent  | Quotidian                       | 26               | 2,336   | 8                          | 2,362                                | 21       |
|                   | Tertian                         | 3                | 131     | 2                          | 134                                  | 3        |
|                   | Quartan                         | ...              | 45      | 1                          | 45                                   | ...      |
|                   | Irregular                       | 3                | 121     | ...                        | 124                                  | 2        |
|                   | Type undiagnosed                | 6                | 910     | ...                        | 916                                  | 3        |
| (b) Remittent     | 3                               | 99               | 10      | 102                        | 5                                    |          |
| (c) Pernicious    | ...                             | 32               | 17      | 32                         | ...                                  |          |
| Erysipelas        | 7                               | 54               | 7       | 61                         | 2                                    |          |
| Pyæmia            | ...                             | 5                | 5       | 5                          | ...                                  |          |
| Septicæmia        | ...                             | 16               | 12      | 16                         | 1                                    |          |
| Tetanus           | ...                             | 9                | 6       | 9                          | 1                                    |          |
| Tubercle          | 53                              | 972              | 241     | 1,025                      | 40                                   |          |
| Gonorrhœa         | 4                               | 240              | ...     | 244                        | 7                                    |          |
| Hydrophobia       | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Scurvy            | ...                             | 2                | ...     | 2                          | ...                                  |          |
| ( Parotitis       | 1                               | 3                | 1       | 4                          | ...                                  |          |
| Carried over      | 129                             | 7,601            | 531     | 7,730                      | 104                                  |          |

GENERAL DISEASES.



| Diseases.          | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|--------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                    |                                 | Ad-<br>missions. | Deaths. |                            |                                      |          |
| Brought forward    | .... 129                        | 7,601            | 531     | 7,730                      | 104                                  |          |
| { Pertussis        | .... 3                          | 169              | 5       | 172                        | ...                                  |          |
| Rheumatic Fever    | .... ...                        | ...              | ...     | ...                        | ...                                  |          |
| Rheumatism         | .... 11                         | 547              | ...     | 558                        | 22                                   |          |
| Gout               | .... 1                          | ...              | ...     | 1                          | ...                                  |          |
| Leprosy :—         |                                 |                  |         |                            |                                      |          |
| (a) Tubercular     | ... ..                          | 4                | ...     | 4                          | ...                                  |          |
| (b) Anaesthetic    | ... ..                          | 10               | ...     | 10                         | ...                                  |          |
| (c) Mixed          | ... ..                          | 6                | ...     | 6                          | ...                                  |          |
| Syphilis :—        |                                 |                  |         |                            |                                      |          |
| (a) Inherited      | ... ....                        | 17               | 4       | 17                         | ...                                  |          |
| (b) Primary        | ... 1                           | 123              | ...     | 124                        | 1                                    |          |
| (c) Secondary      | ... 5                           | 116              | 1       | 121                        | 3                                    |          |
| (d) Tertiary       | ... 5                           | 177              | 4       | 182                        | 15                                   |          |
| Alcoholism         | ... ..                          | 22               | ...     | 22                         | ...                                  |          |
| Delirium Tremens   | ... ..                          | 4                | ...     | 4                          | ...                                  |          |
| Anæmia             | ... 9                           | 309              | 8       | 318                        | 9                                    |          |
| { Debility         | ... 14                          | 576              | 100     | 590                        | 15                                   |          |
| Diabetes Mellitus  | ... 1                           | 57               | 2       | 58                         | 2                                    |          |
| Diabetes Insipidus | ... ..                          | 3                | ...     | 3                          | ...                                  |          |
| New Growth :—      |                                 |                  |         |                            |                                      |          |
| (a) Non Malignant  | ... 1                           | 48               | ...     | 49                         | 1                                    |          |
| (b) Malignant      | ... 2                           | 68               | 9       | 70                         | 3                                    |          |
| Hæmophilia         | ... ..                          | 1                | ...     | 1                          | ...                                  |          |
| Old Age            | ... 1                           | 115              | 40      | 116                        | 1                                    |          |
| Purpura            | ... ..                          | 1                | ...     | 1                          | ...                                  |          |
| Carried over       | ... 183                         | 9,974            | 704     | 10,157                     | 176                                  |          |

| Diseases.                         |     | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|-----------------------------------|-----|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                   |     |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward                   |     | 183                             | 9,974            | 704     | 10,157                     | 176                                  |          |
| DISEASES OF THE NERVOUS SYSTEM :— |     |                                 |                  |         |                            |                                      |          |
| Section 1 :—                      |     |                                 |                  |         |                            |                                      |          |
| Neuritis                          | ... | ...                             | 7                | ...     | 7                          | ...                                  |          |
| Meningitis                        | ... | ...                             | 17               | 12      | 17                         | ...                                  |          |
| Myelitis                          | ... | 1                               | 9                | ...     | 10                         | ...                                  |          |
| Locomotor Ataxia                  | ... | 1                               | 10               | 1       | 11                         | 1                                    |          |
| Hydrocephalus                     | ... | ...                             | 1                | 1       | 1                          | ...                                  |          |
| Encephalitis                      | ... | ...                             | 3                | 3       | 3                          | ...                                  |          |
| Congestion of Brain               | ... | ...                             | 6                | ...     | 6                          | ...                                  |          |
| Abscess of Brain                  | ... | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Cerebral Hæmorrhage               | ... | ...                             | 14               | 8       | 14                         | ...                                  |          |
| Section 2 :—                      |     |                                 |                  |         |                            |                                      |          |
| Paralysis                         | ... | 3                               | 40               | 1       | 43                         | 4                                    |          |
| Epilepsy                          | ... | 3                               | 79               | 9       | 82                         | 2                                    |          |
| Chorea                            | ... | 1                               | 6                | ...     | 7                          | ...                                  |          |
| Neuralgia                         | ... | ...                             | 77               | ...     | 77                         | ...                                  |          |
| Torticollis                       | ..  | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Hysteria                          | ... | ...                             | 11               | ...     | 11                         | ...                                  |          |
| Vertigo                           | ... | ...                             | 3                | ...     | 3                          | ...                                  |          |
| Convulsions                       | ... | ...                             | 1                | 1       | 1                          | ...                                  |          |
| Neurasthenia                      | ... | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Section 3 :—                      |     |                                 |                  |         |                            |                                      |          |
| Idiocy                            | ... | ...                             | 17               | ...     | 17                         | ...                                  |          |
| Mania                             | ... | 1                               | 35               | ...     | 36                         | 1                                    |          |
| Melancholia                       | ... | ...                             | 3                | ...     | 3                          | ...                                  |          |
| Dementia                          | ... | ...                             | 2                | ...     | 2                          | ...                                  |          |
| Delusional Insanity               | ... | 1                               | 9                | ...     | 10                         | ...                                  |          |
| General Paralysis                 | ... | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Carried over                      |     | 194                             | 10,326           | 740     | 10,520                     | 184                                  |          |



| Diseases.                             | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|---------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                       |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward                       | .... 194                        | 10,326           | 740     | 10,520                     | 184                                  |          |
| DISEASES OF THE EYE :—                |                                 |                  |         |                            |                                      |          |
| Conjunctivitis                        | ... 3                           | 50               | ...     | 53                         | 2                                    |          |
| Keratitis                             | ... ..                          | 50               | ...     | 50                         | 3                                    |          |
| Iritis                                | ... ..                          | 16               | ...     | 16                         | ...                                  |          |
| Retinitis                             | ... 1                           | 6                | ...     | 7                          | ...                                  |          |
| Cataract                              | .. 4                            | 135              | ...     | 139                        | 4                                    |          |
| Ophthalmia Tarsi                      | ... 1                           | 20               | ...     | 21                         | ...                                  |          |
| Staphyloma                            | ... ..                          | 5                | ...     | 5                          | ...                                  |          |
| Other Diseases                        | ... ..                          | 31               | ...     | 31                         | ...                                  |          |
| DISEASES OF THE EAR :—                |                                 |                  |         |                            |                                      |          |
| Otitis                                | ... ..                          | 43               | ...     | 43                         | 3                                    |          |
| Necrosis                              | .... ..                         | ...              | ...     | ...                        | ...                                  |          |
| Abscess                               | .... ..                         | 6                | ...     | 6                          | ...                                  |          |
| DISEASES OF THE NOSE :—               |                                 |                  |         |                            |                                      |          |
| Epistaxis                             | .... ..                         | ...              | ...     | ...                        | ...                                  |          |
| Rhinitis                              | .... ..                         | 2                | ...     | 2                          | ...                                  |          |
| DISEASES OF THE CIRCULATORY SYSTEM :— |                                 |                  |         |                            |                                      |          |
| Pericarditis                          | ... ..                          | 1                | 1       | 1                          | ...                                  |          |
| Hypertrophia Cordis                   | .... ..                         | 6                | 2       | 6                          | ...                                  |          |
| Valvular diseases :—                  |                                 |                  |         |                            |                                      |          |
| (a) Aortic                            | .... 3                          | 88               | 19      | 91                         | 2                                    |          |
| (b) Mitral                            | .... 4                          | 115              | 22      | 119                        | 2                                    |          |
| Aneurysm                              | .... ..                         | 2                | ...     | 2                          | ...                                  |          |
| Phlebitis                             | .... ..                         | 4                | 1       | 4                          | ...                                  |          |
| Arterio Sclerosis                     | .... ..                         | 5                | ...     | 5                          | ...                                  |          |
| Syncope                               | .... ..                         | 1                | ...     | 1                          | ....                                 |          |
| Embolism of Heart                     | ... ..                          | 1                | 1       | 1                          | ....                                 |          |
| Carried over                          | .... 210                        | 10,913           | 786     | 11,123                     | 200                                  |          |

| Diseases.       |                                       | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|-----------------|---------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                 |                                       |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward |                                       | 210                             | 10,913           | 786     | 11,123                     | 200                                  |          |
| LOCAL DISEASES. | DISEASES OF THE RESPIRATORY SYSTEM :— |                                 |                  |         |                            |                                      |          |
|                 | Asthma                                | 6                               | 181              | ...     | 187                        | 3                                    |          |
|                 | Laryngitis                            | ...                             | 14               | ...     | 14                         | ...                                  |          |
|                 | Bronchitis                            | 20                              | 881              | 13      | 901                        | 9                                    |          |
|                 | Pneumonia                             | 9                               | 489              | 177     | 498                        | 4                                    |          |
|                 | Pleurisy                              | 3                               | 48               | 7       | 51                         | 4                                    |          |
|                 | Hæmoptysis                            | ...                             | 10               | ...     | 10                         | 1                                    |          |
|                 | Empyœma                               | ...                             | 5                | 1       | 5                          | 2                                    |          |
|                 | Emphysema                             | ...                             | 1                | ...     | 1                          | ...                                  |          |
|                 | Gangrene of Lungs                     | ...                             | 3                | 1       | 3                          | ...                                  |          |
|                 | Hydrothorax                           | ...                             | 2                | ...     | 2                          | ...                                  |          |
|                 | Abscess of Larynx                     | ...                             | 1                | 1       | 1                          | ...                                  |          |
| LOCAL DISEASES. | DISEASES OF THE DIGESTIVE SYSTEM :—   |                                 |                  |         |                            |                                      |          |
|                 | Stomatitis                            | ...                             | 40               | 1       | 40                         | 1                                    |          |
|                 | Tonsillitis                           | 1                               | 19               | ...     | 20                         | ...                                  |          |
|                 | Dyspepsia                             | ...                             | 142              | ...     | 142                        | ...                                  |          |
|                 | Gastritis                             | 3                               | 48               | ...     | 51                         | ...                                  |          |
|                 | Gastralgia                            | 1                               | 30               | ...     | 31                         | 2                                    |          |
|                 | Ulcus Ventriculi                      | ...                             | 2                | ...     | 2                          | 1                                    |          |
|                 | Enteritis                             | 6                               | 219              | 16      | 225                        | 1                                    |          |
|                 | Appendicitis                          | 1                               | 3                | ...     | 4                          | ...                                  |          |
|                 | Hernia                                | 1                               | 54               | ...     | 55                         | 1                                    |          |
|                 | Hæmorrhoids                           | 3                               | 93               | ...     | 96                         | 2                                    |          |
|                 | Fistula in Ano                        | 2                               | 50               | ...     | 52                         | 2                                    |          |
|                 | Hepatitis                             | 1                               | 65               | 5       | 66                         | 2                                    |          |
|                 | Cirrhosis of Liver                    | 2                               | 69               | 11      | 71                         | 2                                    |          |
|                 | Suppuration of Liver                  | 3                               | 16               | 6       | 19                         | 4                                    |          |
|                 | Biliary Calculus                      | 2                               | 1                | ...     | 3                          | ...                                  |          |
|                 | Peritonitis                           | ...                             | 18               | 8       | 18                         | ...                                  |          |
|                 | Diarrhœa                              | 10                              | 458              | 15      | 468                        | 8                                    |          |
|                 | Colic                                 | ...                             | 30               | ...     | 30                         | ...                                  |          |
|                 | Constipation                          | ...                             | 19               | ...     | 19                         | ...                                  |          |
|                 | Carried over                          | 284                             | 13,924           | 1,048   | 14,208                     | 249                                  |          |



| Diseases.                                          | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|----------------------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                                    |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward                                    | ...                             | 284              | 13,924  | 1,048                      | 14,208                               | 249      |
| DISEASES OF THE DIGESTIVE SYSTEM. ( <i>Contd</i> ) |                                 |                  |         |                            |                                      |          |
| Other Diseases                                     | ...                             | 2                | 47      | 4                          | 49                                   | 1        |
| DISEASES OF THE LYMPHATIC SYSTEM :—                |                                 |                  |         |                            |                                      |          |
| Splenitis                                          | ...                             | ...              | 16      | ...                        | 16                                   | ...      |
| Hypertrophica Splenis                              | ...                             | 18               | 656     | 40                         | 674                                  | 5        |
| Adenitis                                           | ...                             | 3                | 128     | ...                        | 131                                  | 3        |
| Lymphangitis                                       | ...                             | 3                | 47      | 2                          | 50                                   | ...      |
| Lymphangiectasis                                   | ...                             | ...              | ...     | ...                        | ...                                  | ...      |
| Abscess of Spleen                                  | ...                             | ...              | 1       | 1                          | 1                                    | ...      |
| Lymphadenoma                                       | ...                             | ...              | 2       | 1                          | 2                                    | ...      |
| DISEASES OF THE URINARY SYSTEM ;—                  |                                 |                  |         |                            |                                      |          |
| Nephritis                                          | ...                             | 10               | 285     | 66                         | 295                                  | 11       |
| Pyelitis                                           | ...                             | ...              | ...     | ...                        | ...                                  | ...      |
| Cystitis                                           | ...                             | 2                | 79      | 2                          | 81                                   | 1        |
| Calculus                                           | ...                             | ...              | 4       | ...                        | 4                                    | ...      |
| Hæmaturia                                          | ...                             | ...              | 4       | ...                        | 4                                    | ...      |
| Perinephretic abscess                              | ...                             | ...              | 2       | ...                        | 2                                    | ...      |
| Urinary Fistula                                    | ...                             | ...              | 9       | ...                        | 9                                    | ...      |
| Carried over                                       | ...                             | 322              | 15,204  | 1,164                      | 15,526                               | 270      |

| Diseases.                            | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|--------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                      |                                 | Ad-<br>missions. | Deaths. |                            |                                      |          |
| Brought forward                      | 322                             | 15,204           | 1,164   | 15,526                     | 270                                  |          |
| DISEASES OF THE GENERATIVE SYSTEM :— |                                 |                  |         |                            |                                      |          |
| (a) <i>Male organs.</i>              |                                 |                  |         |                            |                                      |          |
| Balanitis                            | 2                               | 6                | ....    | 8                          | ...                                  |          |
| Phimosis                             | ....                            | 19               | ....    | 19                         | ...                                  |          |
| Paraphimosis                         | ....                            | 14               | ....    | 14                         | 2                                    |          |
| Stricture of Urethra                 | 1                               | 66               | ....    | 67                         | 3                                    |          |
| Prostatitis                          | ....                            | 9                | ....    | 9                          | ...                                  |          |
| Ulcus Veneris Molle                  | 4                               | 71               | ....    | 75                         | 3                                    |          |
| Hydrocele                            | ....                            | 101              | ....    | 101                        | ...                                  |          |
| Orchitis                             | 2                               | 64               | ....    | 66                         | 2                                    |          |
| Other diseases                       | 5                               | 44               | ....    | 49                         | 1                                    |          |
| (b) <i>Female organs.</i>            |                                 |                  |         |                            |                                      |          |
| Oophoritis                           | ....                            | 5                | ....    | 5                          | ...                                  |          |
| Metritis                             | 1                               | 12               | ....    | 13                         | ...                                  |          |
| Parametritis                         | ....                            | 3                | ....    | 3                          | ...                                  |          |
| Endometritis                         | ....                            | 8                | ....    | 8                          | ...                                  |          |
| Displacement of Uterus               | ....                            | 11               | ....    | 11                         | 1                                    |          |
| Vaginitis                            | ....                            | 11               | ....    | 11                         | 1                                    |          |
| Amenorrhœa                           | ....                            | 7                | ....    | 7                          | ...                                  |          |
| Dysmenorrhœa                         | 1                               | 3                | ....    | 4                          | ...                                  |          |
| Menorrhagia                          | ....                            | 15               | ....    | 15                         | ...                                  |          |
| Metrorrhagia                         | ....                            | 8                | ....    | 8                          | ...                                  |          |
| Leucorrhœa                           | 1                               | 17               | ....    | 18                         | ...                                  |          |
| Mastitis                             | ....                            | 1                | ....    | 1                          | ...                                  |          |
| Abscess of breast                    | ....                            | 15               | ....    | 15                         | 1                                    |          |
| Other Diseases                       | ....                            | 11               | ....    | 11                         | ...                                  |          |
| Carried over                         | 339                             | 15,725           | 1,164   | 16,064                     | 284                                  |          |

LOCAL DISEASES.



| Diseases.                                | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|------------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                          |                                 | Ad-<br>missions. | Deaths. |                            |                                      |          |
| Brought forward                          | 339                             | 15,725           | 1,164   | 16,064                     | 284                                  |          |
| AFFECTIONS CONNECTED WITH PREGNANCY :—   |                                 |                  |         |                            |                                      |          |
| Abortion                                 | ...                             | 13               | ...     | 13                         | ...                                  |          |
| Hæmorrhage                               | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Other affections                         | ...                             | 25               | ...     | 25                         | 1                                    |          |
| AFFECTIONS CONNECTED WITH PARTURITION :— |                                 |                  |         |                            |                                      |          |
| Inertia                                  | ...                             | 3                | ...     | 3                          | ...                                  |          |
| Dystocia                                 | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Postpartum Hæmorrhage                    | 1                               | 1                | ...     | 2                          | ...                                  |          |
| Pelvic Cellulitis                        | 1                               | ...              | ...     | 1                          | ...                                  |          |
| Other affections                         | ...                             | 8                | 2       | 8                          | 1                                    |          |
| DISEASES OF THE ORGANS OF LOCOMOTION :—  |                                 |                  |         |                            |                                      |          |
| Osteitis                                 | ...                             | 9                | ...     | 9                          | ...                                  |          |
| Periostitis                              | ...                             | 8                | ...     | 8                          | ...                                  |          |
| Caries                                   | 2                               | 26               | ...     | 28                         | 3                                    |          |
| Necrosis                                 | ...                             | 17               | ...     | 17                         | 2                                    |          |
| Synovitis                                | ...                             | 18               | ...     | 18                         | ...                                  |          |
| Arthritis                                | 2                               | 33               | 2       | 35                         | 2                                    |          |
| Ankylosis                                | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Ganglion                                 | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Other diseases                           | ...                             | 8                | 1       | 8                          | 1                                    |          |
| Carried over                             | 345                             | 15,896           | 1,169   | 16,241                     | 294                                  |          |

| Diseases.                          | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                    |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward                    | ...                             | 345              | 15,896  | 1,169                      | 16,241                               | 294      |
| DISEASES OF THE CELLULAR TISSUE :— |                                 |                  |         |                            |                                      |          |
| Cellulitis & Abscess               | ...                             | 29               | 636     | 12                         | 665                                  | 28       |
| Gangrene                           | ...                             | 4                | 47      | 16                         | 51                                   | 1        |
| Sinus                              | ...                             | 1                | 3       | ...                        | 4                                    | ...      |
| DISEASES OF THE SKIN :—            |                                 |                  |         |                            |                                      |          |
| Erythema                           | ...                             | ...              | 2       | ...                        | 2                                    | ...      |
| Eczema                             | ...                             | 6                | 164     | ...                        | 170                                  | 5        |
| Impetigo                           | ...                             | 5                | 157     | ...                        | 162                                  | 1        |
| Psoriasis                          | ...                             | ...              | 9       | ...                        | 9                                    | ...      |
| Herpes                             | ...                             | ...              | 5       | ...                        | 5                                    | ...      |
| Zona                               | ...                             | ...              | 9       | ...                        | 9                                    | ...      |
| Pemphigus                          | ...                             | ...              | ...     | ...                        | ...                                  | ...      |
| Carbuncle                          | ...                             | 2                | 21      | ...                        | 23                                   | ...      |
| Furunculus                         | ...                             | 1                | 41      | ...                        | 42                                   | 1        |
| Paronychia                         | ...                             | 1                | 23      | ...                        | 24                                   | 1        |
| Lupus                              | ...                             | ...              | 4       | ...                        | 4                                    | ...      |
| Ulcer                              | ...                             | 18               | 408     | 1                          | 426                                  | 15       |
| Ecthyma                            | ...                             | 2                | 164     | ...                        | 166                                  | 6        |
| Phagedænic Ulcers                  | ...                             | 4                | 181     | ...                        | 185                                  | 2        |
| Other Diseases                     | ...                             | 2                | 20      | ...                        | 22                                   | ...      |
| Carried over                       | ...                             | 420              | 17,790  | 1,198                      | 18,210                               | 354      |

LOCAL DISEASES.



| Diseases.            | ... | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end of<br>1906. | Remarks. |
|----------------------|-----|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                      |     |                                 | Admis-<br>sions. | Deaths. |                            |                                      |          |
| Brought forward      | ... | 420                             | 17,790           | 1,198   | 18,210                     | 354                                  |          |
| INJURIES :—          |     |                                 |                  |         |                            |                                      |          |
| (a) <i>General</i> : |     |                                 |                  |         |                            |                                      |          |
| Burns                | ... | ...                             | 10               | 4       | 10                         | ...                                  |          |
| Lightning Stroke     | ... | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Asphyxia             | ... | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Shock from :—        |     |                                 |                  |         |                            |                                      |          |
| Drowning             | ... | ...                             | 1                | ...     | 1                          | 1                                    |          |
| Multiple Injuries    | ... | ...                             | 1                | 1       | 1                          | ...                                  |          |
| Concussion of Brain  | ... | ...                             | 1                | ...     | 1                          | ...                                  |          |
| (b) <i>Local</i> :—  |     |                                 |                  |         |                            |                                      |          |
| Burns and Scalds     | ... | ...                             | 20               | 1       | 20                         | 1                                    |          |
| Bruise               | ... | 5                               | 377              | ...     | 382                        | ...                                  |          |
| Wound                | ... | 26                              | 525              | 8       | 551                        | 18                                   |          |
| Sprain               | ..  | ...                             | 30               | ...     | 30                         | 1                                    |          |
| Dislocation          | ... | ...                             | 19               | ...     | 19                         | 1                                    |          |
| Rupture of Urethra   | ... | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Fracture             | ... | 8                               | 106              | 3       | 114                        | 10                                   |          |
| Gunshot Wound        | ... | 2                               | 11               | 1       | 13                         | ...                                  |          |
| Foreign Bodies       | ... | ...                             | 4                | ...     | 4                          | ...                                  |          |
| Carried over         | ... | 461                             | 18,896           | 1,216   | 19,357                     | 386                                  |          |

| Diseases.                            | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treated. | Remain-<br>ing at<br>end<br>of 1906. | Remarks. |
|--------------------------------------|---------------------------------|------------------|---------|----------------------------|--------------------------------------|----------|
|                                      |                                 | Ad-<br>missions. | Deaths. |                            |                                      |          |
| Brought forward                      | 461                             | 18,896           | 1,216   | 19,357                     | 386                                  |          |
| <b>MALFORMATIONS :—</b>              |                                 |                  |         |                            |                                      |          |
| Head                                 | ...                             | 4                | ...     | 4                          | ...                                  |          |
| Thorax                               | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Abdomen                              | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Upper Limb                           | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Lower Limb                           | ...                             | 3                | ...     | 3                          | ...                                  |          |
| <b>POISONS :—</b>                    |                                 |                  |         |                            |                                      |          |
| Mineral                              | ...                             | 7                | 3       | 7                          | ...                                  |          |
| Vegetable                            | ...                             | 5                | ...     | 5                          | ...                                  |          |
| Animal                               | ...                             | ...              | ...     | ...                        | ...                                  |          |
| <b>PARASITES :—</b>                  |                                 |                  |         |                            |                                      |          |
| Tape Worms                           | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Round Worms                          | ...                             | 83               | ...     | 83                         | 1                                    |          |
| Thread Worms                         | ...                             | ...              | ...     | ...                        | ...                                  |          |
| Bilharzia Hæmatobia                  | ...                             | 24               | ...     | 24                         | 1                                    |          |
| <b>Filariasis :—</b>                 |                                 |                  |         |                            |                                      |          |
| Elephantiasis                        | 3                               | 30               | ...     | 33                         | ...                                  |          |
| Chyluria                             | ...                             | 8                | ...     | 8                          | ...                                  |          |
| Ankylostoma                          | 2                               | 62               | 2       | 64                         | 1                                    |          |
| Itch                                 | 5                               | 432              | ...     | 437                        | 6                                    |          |
| Tinea Favosa                         | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Aphthæ                               | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Tinea Circinata                      | ...                             | 6                | ...     | 6                          | ...                                  |          |
| Thrust                               | ...                             | 1                | ...     | 1                          | ...                                  |          |
| Mycetoma                             | ...                             | 2                | ...     | 2                          | ...                                  |          |
| Not specified*                       | 8                               | 710              | ...     | 718                        | 8                                    |          |
| Parturition ( <i>Uncomplicated</i> ) | 3                               | 95               | ...     | 98                         | 1                                    |          |
| Total                                | 482                             | 20,371           | 1,221   | 20,853                     | 404                                  |          |

\* Includes mothers admitted with their sick children and vice versa, malingering, &c.



## SUMMARY.

| Diseases.                                           | Remaining<br>at end of<br>1905. | Admis-<br>sions. | Total<br>cases<br>treated. | Remaining<br>at end of<br>1906. | Remarks. |
|-----------------------------------------------------|---------------------------------|------------------|----------------------------|---------------------------------|----------|
| General Diseases                                    | 183                             | 9,974            | 10,157                     | 176                             |          |
| Diseases of the Nervous System                      | 11                              | 352              | 363                        | 8                               |          |
| „ Eye                                               | 9                               | 313              | 322                        | 9                               |          |
| „ Ear                                               | ...                             | 49               | 49                         | 3                               |          |
| „ Nose                                              | ...                             | 2                | 2                          | ...                             |          |
| „ Circulatory System                                | 7                               | 223              | 230                        | 4                               |          |
| „ Respiratory System                                | 38                              | 1,635            | 1,673                      | 23                              |          |
| „ Digestive System                                  | 38                              | 1,423            | 1,461                      | 27                              |          |
| „ Lymphatic System                                  | 24                              | 850              | 874                        | 8                               |          |
| „ Urinary System                                    | 12                              | 383              | 395                        | 12                              |          |
| „ Generative System                                 | 17                              | 521              | 538                        | 14                              |          |
| Affections connected with Pregnancy and Parturition | 2                               | 51               | 53                         | 2                               |          |
| Diseases of the Organs of Locomotion                | 4                               | 120              | 124                        | 8                               |          |
| „ Cellular Tissue                                   | 34                              | 686              | 720                        | 29                              |          |
| „ Skin                                              | 41                              | 1,208            | 1,249                      | 31                              |          |
| Injuries                                            | 41                              | 1,106            | 1,147                      | 32                              |          |
| Malformations                                       | ...                             | 7                | 7                          | ...                             |          |
| Parasites                                           | 10                              | 651              | 661                        | 9                               |          |
| Poisons                                             | ...                             | 12               | 12                         | ...                             |          |
| Not specified                                       | 8                               | 710              | 718                        | 8                               |          |
| Parturition ( <i>Uncomplicated</i> )                | 3                               | 95               | 98                         | 1                               |          |
| Total                                               | 482                             | 20,371           | 20,853                     | 404                             |          |

*Return of Births.*

|                       | Number. | Deaths. | Remarks. |
|-----------------------|---------|---------|----------|
| Born alive at term... | 96      | 2       |          |
| Prematurely born ...  | 12      | 11      |          |
| Still-born ...        | 8       | 8       |          |
| Total                 | 116     | 21      |          |

## RETURN OF SURGICAL OPERATIONS.

| Operations.                     | Number. | Deaths. | Remarks. |
|---------------------------------|---------|---------|----------|
| Operations for Tumours ...      | 26      | ...     |          |
| „ Evacuation of Abscesses ...   | 641     | 6       |          |
| „ Removal of Foreign Bodies...  | 9       | ...     |          |
| Operations on Blood vessels ... | ...     | ...     |          |
| „ Lymphatic Glands ...          | 30      | ...     |          |
| „ Skin and Subcutaneous Tissues | 59      | ...     |          |
| „ Bones ...                     | 46      | 1       |          |
| „ Nerves ...                    | ...     | ...     |          |
| „ Joints ...                    | 29      | 3       |          |
| „ Muscles and Tendons ...       | 8       | 1       |          |
| „ Skull and Brain ...           | 2       | 1       |          |
| „ Eye ...                       | 106     | ...     |          |
| „ Ear ...                       | 7       | ...     |          |
| „ Head and Face ...             | 58      | ...     |          |
| „ Chest ...                     | 18      | 1       |          |
| „ Abdominal Cavity ...          | 73      | 7       |          |
| „ Liver ...                     | 9       | 3       |          |
| „ Spleen ...                    | 1       | 1       |          |
| „ Rectum and anus ...           | 47      | ...     |          |
| „ Urinary System ...            | 47      | 2       |          |
| „ Male Generative Organs ...    | 142     | ...     |          |
| „ Female Generative Organs ...  | 14      | 1       |          |
| Amputations ...                 | 33      | 5       |          |
| Obstetric Operations ...        | 3       | ...     |          |
| Other Operations ...            | 27      | 1       |          |
| Total ...                       | 1,435   | 33      |          |



*General return of Mental diseases.**Admissions and Deaths in 1906 at the Lunatic Asylum.*

| Diseases.                                                                         | Remaining<br>at end of<br>1905. | Yearly Total.    |         | Total cases<br>treated. | Remaining<br>at end of<br>1906. |
|-----------------------------------------------------------------------------------|---------------------------------|------------------|---------|-------------------------|---------------------------------|
|                                                                                   |                                 | Admis-<br>sions. | Deaths. |                         |                                 |
| Idiocy ...                                                                        | 10                              | 9                | 2       | 19                      | 13                              |
| Mania ...                                                                         | 209                             | 83               | 20      | 292                     | 215                             |
| Melancholia ...                                                                   | 32                              | 15               | 3       | 47                      | 35                              |
| Dementia ...                                                                      | 117                             | 7                | 5       | 124                     | 116                             |
| Delusional Insanity ...                                                           | 43                              | 2                | ...     | 45                      | 44                              |
| Total ...                                                                         | 411                             | 116              | 30      | 527                     | 423                             |
| Admitted on interim<br>order, but found sane<br>by Commissioners in<br>Lunacy ... | ...                             | 9                | ...     | 9                       | 1                               |
| Grand Total ...                                                                   | 411                             | 125              | 30      | 536                     | 424*                            |

\* Exclusive of the Chinaman Ah-Wen absconded and not yet recaptured.

H. LORANS,

Director,  
Medical & Health Department.

# ANNEXURE III.

Statement showing the Deaths from Malaria and from all causes\* for the years 1896-1906.

| Districts.         | Years.         | 1896  | 1897  | 1898  | 1899  | 1900  | 1901  | 1902  | 1903  | 1904  | 1905  | 1906  |
|--------------------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Port Louis ..      | Malaria ...    | 1,565 | 1,111 | 1,394 | 789   | 601   | 802   | 604   | 451   | 378   | 939   | 549   |
|                    | All causes ... | 3,184 | 2,262 | 2,699 | 2,836 | 1,982 | 3,002 | 2,543 | 2,428 | 2,148 | 2,926 | 2,416 |
| Pamplemousses ...  | Malaria ...    | 1,302 | 688   | 871   | 616   | 691   | 916   | 812   | 1,020 | 820   | 1,084 | 985   |
|                    | All causes ... | 1,966 | 1,110 | 1,282 | 1,319 | 1,346 | 1,626 | 1,509 | 1,636 | 1,381 | 1,795 | 1,734 |
| Riv. du Rempart... | Malaria ...    | 598   | 308   | 378   | 241   | 219   | 299   | 243   | 419   | 326   | 498   | 531   |
|                    | All causes ... | 1,042 | 580   | 674   | 629   | 722   | 839   | 731   | 940   | 748   | 1,039 | 1,253 |
| Flacq ...          | Malaria ...    | 1,309 | 982   | 1,153 | 1,002 | 1,112 | 1,000 | 811   | 1,328 | 1,047 | 1,557 | 1,511 |
|                    | All causes ... | 2,065 | 1,572 | 1,855 | 1,670 | 1,961 | 1,759 | 1,465 | 2,121 | 1,721 | 2,412 | 2,401 |
| Grand Port ..      | Malaria ...    | 1,007 | 915   | 691   | 625   | 690   | 823   | 643   | 1,065 | 537   | 1,090 | 643   |
|                    | All causes ... | 2,234 | 1,702 | 1,508 | 1,492 | 1,633 | 1,751 | 1,538 | 2,188 | 1,595 | 2,204 | 1,700 |
| Savanne ...        | Malaria ...    | 592   | 491   | 324   | 374   | 437   | 524   | 368   | 524   | 413   | 545   | 465   |
|                    | All causes ... | 1,299 | 974   | 749   | 969   | 992   | 1,231 | 988   | 1,124 | 976   | 1,212 | 1,156 |
| Plaines Wilhems .. | Malaria ...    | 1,012 | 783   | 944   | 346   | 384   | 351   | 217   | 273   | 189   | 274   | 292   |
|                    | All causes ... | 2,292 | 1,644 | 1,894 | 1,810 | 2,201 | 2,124 | 1,957 | 1,950 | 1,684 | 1,896 | 2,240 |
| Moka ...           | Malaria ...    | 393   | 349   | 428   | 231   | 296   | 453   | 352   | 369   | 304   | 427   | 479   |
|                    | All causes ... | 1,197 | 787   | 943   | 915   | 1,054 | 1,142 | 986   | 976   | 899   | 1,097 | 1,236 |
| Black River ..     | Malaria ..     | 403   | 263   | 324   | 352   | 416   | 442   | 406   | 391   | 319   | 350   | 372   |
|                    | All causes ... | 564   | 435   | 460   | 508   | 607   | 685   | 609   | 631   | 556   | 546   | 638   |

\* Deaths from plague excepted.

H. LORANS,

Director.



# ANNEXURE IV.

Statement showing the number of plague cases and the Districts in which they were detected in each month of the year 1906.

| Districts.         | January. |      | February. |      | March. |      | April.  |      | May.    |      | June.   |      | July. |      | August. |      | September. |      | October. |      | November. |      | December. |      | Total.  |      | Percentage mortality. |
|--------------------|----------|------|-----------|------|--------|------|---------|------|---------|------|---------|------|-------|------|---------|------|------------|------|----------|------|-----------|------|-----------|------|---------|------|-----------------------|
|                    | Cured    | Died | Cured     | Died | Cured  | Died | Cured   | Died | Cured   | Died | Cured   | Died | Cured | Died | Cured   | Died | Cured      | Died | Cured    | Died | Cured     | Died | Cured     | Died | Cured   | Died |                       |
| Port Louis         | ...      | 3    | 1         | ...  | 2      | ...  | ...     | ...  | ...     | ...  | ...     | ...  | 4     | ...  | 4       | 13   | 8          | 48   | 21       | 85   | 36        | 106  | 7         | 52   | 79      | 311  | 79.7                  |
| Pamplemousses      | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | 1    | ...        | ...  | ...      | 2    | ...       | ...  | ...       | ...  | ...     | 5    | 100.                  |
| Rivière du Rempart | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | 1         | ...  | ...       | ...  | ...     | 1    | 50.                   |
| Flacq ...          | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | ...       | ...  | ...       | ...  | ...     | ...  | ...                   |
| Grand Port         | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | ...       | ...  | ...       | ...  | ...     | ...  | ...                   |
| Savanne ...        | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | 1         | ...  | ...       | ...  | 1       | ...  | 50.                   |
| Plaines Wilhems    | 3        | 5    | ...       | 1    | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | 2        | 3    | ...       | 3    | 4         | 14   | 9       | 26   | 71.4                  |
| Black River        | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | ...       | ...  | ...       | ...  | ...     | ...  | ...                   |
| Moka ...           | ...      | ...  | ...       | ...  | ...    | ...  | ...     | ...  | ...     | ...  | ...     | ...  | ...   | ...  | ...     | ...  | ...        | ...  | ...      | ...  | ...       | ...  | ...       | ...  | ...     | ...  | ...                   |
| Total.             | 3        | 8    | 1         | 1    | 2      | ...  | ...     | ...  | ...     | ...  | ...     | ...  | 4     | ...  | 4       | 14   | 8          | 48   | 23       | 90   | 38        | 113  | 11        | 66   | 90      | 344  | 79.3                  |
|                    | { 11 }   |      | { 2 }     |      | { 2 }  |      | { ... } |      | { ... } |      | { ... } |      | { 4 } |      | { 18 }  |      | { 56 }     |      | { 113 }  |      | { 151 }   |      | { 77 }    |      | { 434 } |      |                       |

H. LORANS,  
Director.

# ANNEXURE V.

Statement showing Plague Incidence and death-rate since 1899.

| B. Quiescent stage.  |     |                          |       |                     |     |                            |      |                       |     |                           |      |                       |     |                           |      |                     |     |                             |       |                          |     |                            |     |                     |     |                              |      |                        |     |                               |      |     |
|----------------------|-----|--------------------------|-------|---------------------|-----|----------------------------|------|-----------------------|-----|---------------------------|------|-----------------------|-----|---------------------------|------|---------------------|-----|-----------------------------|-------|--------------------------|-----|----------------------------|-----|---------------------|-----|------------------------------|------|------------------------|-----|-------------------------------|------|-----|
| A. Epidemic period.  |     |                          |       |                     |     |                            |      |                       |     |                           |      |                       |     |                           |      |                     |     |                             |       |                          |     |                            |     |                     |     |                              |      |                        |     |                               |      |     |
| January to May 1899. |     | June 1899 to March 1900. |       | April to July 1900. |     | August 1900 to March 1901. |      | April to August 1901. |     | Sept. 1901 to March 1902. |      | April to August 1902. |     | Sept. 1902 to March 1903. |      | April to June 1903. |     | July 1903 to February 1904. |       | March 1904 to July 1904. |     | August 1904 to March 1905. |     | April to July 1905. |     | August 1905 to January 1906. |      | February to July 1906. |     | August 1906 to February 1907. |      |     |
| C.                   | D.  | C.                       | D.    | C.                  | D.  | C.                         | D.   | C.                    | D.  | C.                        | D.   | C.                    | D.  | C.                        | D.   | C.                  | D.  | C.                          | D.    | C.                       | D.  | C.                         | D.  | C.                  | D.  | C.                           | D.   | C.                     | D.  | C.                            | D.   |     |
| Port Louis           | ... | 172                      | 698   | ...                 | ... | 94                         | 334  | ...                   | ... | 180                       | 593  | ...                   | ... | 62                        | 213  | ...                 | ... | 211                         | 769   | ...                      | ... | 41                         | 240 | ...                 | ... | 41                           | 163  | ...                    | ... | 81                            | 322  |     |
| Pamplemousses        | ... | 24                       | 88    | ...                 | ... | 30                         | 74   | ...                   | ... | 14                        | 26   | ...                   | ... | ...                       | 3    | ...                 | ... | 3                           | 16    | ...                      | ... | 6                          | 6   | ...                 | ... | ...                          | 2    | ...                    | ... | ...                           | 5    |     |
| Rivière du Rempart   | ... | 32                       | 99    | ...                 | ... | 57                         | 108  | ...                   | ... | 26                        | 43   | ...                   | ... | ...                       | ...  | ...                 | ... | 1                           | 6     | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | 1   | ...                           |      |     |
| Flacq                | ... | 2                        | 1     | ...                 | ... | 6                          | 15   | ...                   | ... | 14                        | 32   | ...                   | ... | ...                       | ...  | ...                 | ... | 24                          | 27    | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  |     |
| Grand Port           | ... | 3                        | 2     | ...                 | ... | 5                          | 11   | ...                   | ... | 2                         | 2    | ...                   | ... | 1                         | 1    | ...                 | ... | 17                          | 43    | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | 1    | ...                    | ... | ...                           | ...  |     |
| Savanne              | ... | 15                       | 63    | ...                 | ... | 6                          | 7    | ...                   | ... | 1                         | 3    | ...                   | ... | ...                       | ...  | ...                 | ... | 12                          | 16    | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  |     |
| Plaines Wilhems      | ... | 68                       | 207   | ...                 | ... | 21                         | 91   | ...                   | ... | 55                        | 84   | ...                   | ... | 24                        | 44   | ...                 | ... | 103                         | 234   | ...                      | ... | 27                         | 54  | ...                 | ... | 8                            | 23   | ...                    | ... | 17                            | 51   |     |
| Black River          | ... | ...                      | 5     | ...                 | ... | ...                        | 3    | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | 2                           | 5     | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  |     |
| Moka                 | ... | 3                        | 9     | ...                 | ... | 1                          | 1    | ...                   | ... | ...                       | 1    | ...                   | ... | 1                         | 1    | ...                 | ... | ...                         | 1     | ...                      | ... | 3                          | 3   | ...                 | ... | ...                          | ...  | ...                    | ... | 1                             | 1    |     |
| Grand Total          | 3   | 319                      | 1,172 | ...                 | ... | 220                        | 644  | ...                   | ... | 292                       | 784  | ...                   | ... | 83                        | 263  | ...                 | ... | 376                         | 1,117 | ...                      | ... | 85                         | 339 | ...                 | ... | 49                           | 189  | ...                    | ... | 101                           | 382  |     |
| Death-rate o/o       | ... | 1,491                    | 78.6  | ...                 | ... | 864                        | 74.5 | ...                   | ... | 1,076                     | 72.9 | ...                   | ... | 351                       | 74.9 | ...                 | ... | 1,493                       | 77.8  | ...                      | ... | 424                        | 80. | ...                 | ... | 238                          | 79.4 | ...                    | ... | 483                           | 79.1 |     |
| Port Louis           | 3   | 16                       | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | 1   | 12                        | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | 3   | 18                           | ...  | ...                    | ... | ...                           | ...  | 4   |
| Pamplemousses        | ... | 2                        | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Rivière du Rempart   | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Flacq                | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Grand Port           | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Savanne              | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Plaines Wilhems      | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Black River          | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Moka                 | ... | ...                      | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | ... | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |
| Grand Total          | 3   | 18                       | ...   | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | 3   | 21                        | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | 3   | 18                           | ...  | ...                    | ... | ...                           | ...  | ... |
| Doath-rate o/o       | ... | 21                       | 85.7  | ...                 | ... | ...                        | ...  | ...                   | ... | ...                       | ...  | ...                   | 24  | ...                       | ...  | ...                 | ... | ...                         | ...   | ...                      | ... | ...                        | ... | ...                 | ... | ...                          | ...  | ...                    | ... | ...                           | ...  | ... |

Note : C = Cured.  
D = Died.

H. LORANS,  
Director.



ANNEXURE VI.

# SANITARY WORK

PERFORMED IN PORT LOUIS

DURING

1906.

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RETURN OF DUTIES PERFORMED

| INSPECTORS.  |     |     | Sections. | Private Pre-mises. | Shops & Stores. | Lodging Houses. | Livery Stables. | Government Establishments. | Public Latrines. | Streams and Water courses. | Gully Holes. | Special Duty. | Special Enquiries. | Cemeteries. | Shore. | Slaughter Houses. |
|--------------|-----|-----|-----------|--------------------|-----------------|-----------------|-----------------|----------------------------|------------------|----------------------------|--------------|---------------|--------------------|-------------|--------|-------------------|
| Chaillet     | ... | ..  | 1         | 1,856              | 178             | 5               | 270             | 96                         | 73               | 5                          | ...          | 55            | 11                 | 31          | 4      | 9                 |
| Baretti      | ... | ... | 2         | 1,370              | 106             | 46              | 84              | 104                        | 45               | 30                         | 16           | 12            | 14                 | ...         | ...    | 22                |
| Bouquet      | ... | ..  | 3         | 1,952              | 47              | ...             | 385             | 20                         | 57               | 99                         | 29           | 70            | 40                 | ...         | ...    | ...               |
| L'Étang      | ... | ... | 4         | 2,189              | 233             | 48              | 443             | 75                         | 31               | 34                         | 104          | 45            | 109                | ...         | 16     | ...               |
| Ware-Saundby | ... | ... | 5         | 1,945              | 474             | 8               | 317             | 101                        | 307              | 40                         | ...          | 103           | 4                  | ...         | ...    | ...               |
| Jomain       | ... | ... | 6         | 1,525              | 136             | 8               | 172             | 130                        | 22               | 52                         | 395          | 76            | 18                 | ...         | 26     | ...               |
| César        | ... | ... | 7         | 1,214              | 50              | ...             | 129             | ...                        | 33               | 43                         | 24           | 18            | 36                 | ...         | ...    | ...               |
| Pitchen      | ... | ... | 8         | 1,344              | 171             | 18              | 189             | 102                        | 168              | 25                         | 64           | 105           | 89                 | 39          | 27     | ...               |
| Total        |     |     | ...       | 13,395             | 1,395           | 133             | 1,989           | 628                        | 736              | 328                        | 632          | 484           | 321                | 70          | 73     | 31                |

CONTRA-

| INSPECTORS.  |     |     | Sections. | Art. 41 of Ord. 32 of 1894 & 1895. |         |            | Art. 29 of Ord. 32 of 1894 & 1895. |         |            | Regulations 220 of 1884. |         |            | Regulations 37 of 1882. |         |            |
|--------------|-----|-----|-----------|------------------------------------|---------|------------|------------------------------------|---------|------------|--------------------------|---------|------------|-------------------------|---------|------------|
|              |     |     |           | No.                                | Abated. | Abey-ance. | No.                                | Abated. | Abey-ance. | No.                      | Abated. | Abey-ance. | No.                     | Abated. | Abey-ance. |
| Chaillet     | ... | ... | 1         | 1                                  | 1       | ...        | 218                                | 206     | 12         | 143                      | 143     | ...        | 81                      | 81      | ...        |
| Baretti      | ... | ..  | 2         | 11                                 | 11      | ...        | 178                                | 151     | 27         | 19                       | 19      | ...        | ...                     | ...     | ...        |
| Bouquet      | ... | ... | 3         | 1                                  | 1       | ...        | 215                                | 196     | 19         | 85                       | 84      | 1          | 139                     | 139     | ...        |
| L'Étang      | ... | ... | 4         | 11                                 | 11      | ...        | 204                                | 172     | 32         | 6                        | 6       | ...        | 30                      | 30      | ...        |
| Ware-Saundby | ... | ..  | 5         | 6                                  | 4       | 2          | 129                                | 36      | 93         | 15                       | 9       | 6          | 14                      | 7       | 7          |
| Jomain       | ... | ... | 6         | 4                                  | 4       | ...        | 226                                | 194     | 32         | 36                       | 36      | ...        | 44                      | 44      | ...        |
| César        | ... | ... | 7         | 3                                  | 3       | ...        | 147                                | 104     | 43         | 65                       | 65      | ...        | 3                       | ...     | 3          |
| Pitchen      | ... | ... | 8         | 3                                  | 3       | ...        | 183                                | 176     | 7          | 28                       | 28      | ...        | 20                      | 20      | ...        |
| Total        |     |     | ...       | 40                                 | 38      | 2          | 1,500                              | 1,235   | 265        | 397                      | 390     | 7          | 331                     | 321     | 10         |



DURING THE YEAR 1906.

| Tanneries. | Exhumation. | Inodore Establishments. | Morgue. | Attendances at sales. | Markets. | Lighters. | Gratuitous Latrines. | Cremations. | Dhobies. | Bake Houses. | Lime Kilns. | Sale of Meat. | Docks. | Lavatories. | Cowsheds. | Factories. | Camps. | Pig-Styes. | Service of Notices. | Control of Public Nuisances. | Quarantine. | Milk Examination. |
|------------|-------------|-------------------------|---------|-----------------------|----------|-----------|----------------------|-------------|----------|--------------|-------------|---------------|--------|-------------|-----------|------------|--------|------------|---------------------|------------------------------|-------------|-------------------|
| 23         | ...         | 29                      | ...     | ...                   | ...      | ...       | 142                  | 6           | 6        | ...          | 14          | ...           | ...    | 11          | 158       | 8          | 34     | 5          | 111                 | ...                          | ...         | 80                |
| ...        | ...         | ...                     | ...     | ...                   | 19       | ...       | ...                  | 4           | 15       | 11           | ...         | ...           | ...    | ...         | ...       | 15         | 27     | ...        | 197                 | 126                          | 1           | 60                |
| ...        | ...         | ...                     | ...     | ...                   | ...      | ...       | ...                  | 1           | 16       | 20           | ...         | ...           | ...    | ...         | 20        | 8          | ...    | ...        | 206                 | 516                          | 3           | 194               |
| ...        | ...         | ...                     | ...     | ...                   | ...      | 228       | ...                  | ...         | 59       | 35           | ...         | 96            | 44     | ...         | 18        | 19         | 27     | ...        | ...                 | 322                          | ...         | 103               |
| ...        | ...         | ...                     | ...     | 23                    | 196      | ...       | ...                  | ...         | 13       | 18           | ...         | 185           | ...    | ...         | ...       | ...        | ...    | ...        | 38                  | 493                          | ...         | 122               |
| ...        | ...         | ...                     | ...     | ...                   | ...      | 365       | ...                  | ...         | 37       | 32           | ...         | ...           | 35     | ...         | 19        | 9          | 37     | ...        | 43                  | 545                          | ...         | 183               |
| ...        | ...         | ...                     | ...     | ...                   | ...      | ...       | ...                  | ...         | ...      | ...          | ...         | ...           | ...    | ...         | 140       | 4          | 2      | 55         | 139                 | 189                          | 1           | 43                |
| ...        | 6           | ...                     | 4       | ...                   | 21       | ...       | 8                    | ...         | 13       | 6            | 8           | ...           | ...    | ...         | 16        | 22         | 23     | 23         | 128                 | 269                          | 2           | 138               |
| 23         | 6           | 29                      | 4       | 23                    | 236      | 593       | 150                  | 11          | 159      | 122          | 22          | 281           | 79     | 11          | 371       | 85         | 150    | 83         | 862                 | 2,460                        | 7           | 923               |

VENTIONS.

| Public Nuisances. |         |           | Scavengering. | Notices served. | Attendance at Court. | Regulations 148 of 1878. | Regulations 192 of 1882. | Regulations 63 of 1875. | Regulations 134 of 1883. | Regulations 67 of 1885. (Milk). | Orders issued under 21/1900. | Regulations 213 of 1905. | Ordinance 25 of 1900. | Regulations 198 of 1900. | FINES. |     | REMARKS. |
|-------------------|---------|-----------|---------------|-----------------|----------------------|--------------------------|--------------------------|-------------------------|--------------------------|---------------------------------|------------------------------|--------------------------|-----------------------|--------------------------|--------|-----|----------|
| No.               | Abated. | Abeyance. |               |                 |                      |                          |                          |                         |                          |                                 |                              |                          |                       |                          | Rs.    | c.  |          |
| 53                | 40      | 13        | 194           | 359             | 42                   | 1                        | 52                       | ...                     | ...                      | 1                               | 7                            | 20                       | 1                     | ...                      | 174    | 50  |          |
| 52                | 8       | 44        | 278           | 197             | 29                   | ...                      | ...                      | ...                     | ...                      | ...                             | 194                          | ...                      | ...                   | ...                      | 36     | 50  |          |
| 118               | 82      | 36        | 724           | 435             | 49                   | ...                      | 2                        | ...                     | ...                      | 2                               | 69                           | ...                      | ...                   | ...                      | 73     | ... |          |
| 93                | 60      | 33        | 221           | 228             | 45                   | ...                      | ...                      | ...                     | ...                      | ...                             | 460                          | ...                      | ...                   | ...                      | 329    | ... |          |
| 145               | 30      | 115       | 259           | 220             | 42                   | ...                      | ...                      | ...                     | ...                      | ...                             | 240                          | ...                      | ...                   | 1                        | 74     | ... |          |
| 163               | 111     | 52        | 737           | 86              | 11                   | ...                      | ...                      | ...                     | ...                      | ...                             | 127                          | ...                      | ...                   | ...                      | 75     | ... |          |
| 81                | 58      | 23        | 254           | 215             | 8                    | ...                      | ...                      | ...                     | ...                      | ...                             | 4                            | ...                      | ...                   | ...                      | 36     | 50  |          |
| 59                | 32      | 27        | 326           | 231             | 31                   | 1                        | 25                       | ...                     | ...                      | ...                             | 137                          | ...                      | ...                   | ...                      | 34     | 50  |          |
| 764               | 421     | 343       | 2,993         | 1,971           | 257                  | 2                        | 79                       | ...                     | ...                      | 3                               | 1,238                        | 20                       | 1                     | 1                        | 833    | ... |          |

F. J. R. MOMPLÉ,  
Acting Assistant Director





ANNEXURE VII.

# SANITARY WORK

PERFORMED IN THE RURAL DISTRICTS

1906.



## STATEMENT OF ALL SANITARY CONTRAVENTIONS,

|                           | CONTRAVENTIONS. |                                                                                       |                                 |                        |     |                            | NOTICES SERVED.    |                   |                    |                    |                    |                     |                    |                    |                   |                   |                  |                 |                   |                  |                      |  |
|---------------------------|-----------------|---------------------------------------------------------------------------------------|---------------------------------|------------------------|-----|----------------------------|--------------------|-------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|-------------------|-------------------|------------------|-----------------|-------------------|------------------|----------------------|--|
| Sections.                 | No.<br>of       | No. of cases in which<br>parties were warned<br>and articles seized<br>and destroyed. | No. of parties pro-<br>secuted. | Amount<br>of<br>Fines. |     | Under Regn. 96 of<br>1877. | Regn. 185 of 1879. | Regn. 79 of 1883. | Regn. 162 of 1885. | Regn. 234 of 1889. | Regn. 263 of 1893. | Ord. 32 of 1894-95. | Regn. 130 of 1898. | Regn. 134 of 1883. | Regn. 79 of 1882. | Regn. 65 of 1903. | Ord. 18 of 1900. | Ord. 9 of 1889. | Regn. 67 of 1890. | Ord. 21 of 1900. | Notices in abeyance. |  |
|                           |                 |                                                                                       |                                 | Rs.                    | c.  |                            |                    |                   |                    |                    |                    |                     |                    |                    |                   |                   |                  |                 |                   |                  |                      |  |
| Pamplemousses—Lower       | 24              | 2                                                                                     | 22                              | 42                     | ..  | ...                        | ...                | ...               | 44                 | ...                | ...                | 204                 | 26                 | ...                | 1                 | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| „ —Upper                  | 69              | 8                                                                                     | 61                              | 124                    | ... | ...                        | 30                 | ...               | 25                 | ...                | 92                 | 142                 | 53                 | 1                  | ...               | ...               | ...              | ...             | ...               | ...              | 46                   |  |
| Rivière du Rempart ...    | 127             | 46                                                                                    | 81                              | 334                    | ... | ...                        | 16                 | ...               | 52                 | 2                  | ...                | 148                 | 7                  | ...                | ...               | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Flacq—Northern            | 140             | 19                                                                                    | 121                             | 131                    | 75  | ...                        | 20                 | 2                 | 63                 | 11                 | 8                  | 216                 | 1                  | ...                | ...               | 8                 | 1                | 7               | 5                 | ...              | ...                  |  |
| „ —Southern               | 56              | 10                                                                                    | 46                              | 121                    | ... | ...                        | ...                | ...               | 205                | 14                 | 22                 | 160                 | ...                | ...                | 6                 | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Rose Belle ...            | 150             | 12                                                                                    | 138                             | 378                    | 43  | ...                        | ...                | ...               | 413                | ...                | 53                 | ...                 | ...                | ...                | ...               | ...               | ...              | ...             | ...               | ...              | 126                  |  |
| Grand Port...             | 257             | 12                                                                                    | 245                             | 391                    | 17  | ...                        | 8                  | ...               | 196                | 2                  | 60                 | ...                 | ...                | ...                | ...               | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Savanne ...               | 273             | 23                                                                                    | 250                             | 424                    | 25  | 4                          | ...                | ...               | 523                | 4                  | ...                | ...                 | ...                | ...                | 2                 | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Black River               | 72              | 2                                                                                     | 70                              | 143                    | 35  | ...                        | 8                  | ...               | 90                 | 8                  | ...                | 47                  | ...                | ...                | 4                 | ...               | ...              | ...             | ...               | 1                | ...                  |  |
| Curepipe ...              | 148             | 19                                                                                    | 129                             | 488                    | 26  | 2                          | ...                | ...               | ...                | 17                 | ...                | 937                 | 107                | ...                | ...               | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Vacoas ...                | 61              | 4                                                                                     | 57                              | 260                    | 50  | ...                        | ...                | ...               | 143                | ...                | ...                | 149                 | ...                | ...                | 53                | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Quatre Bornes             | 75              | 5                                                                                     | 70                              | 235                    | 25  | ...                        | 1                  | ...               | 68                 | ...                | ...                | 83                  | ...                | ...                | ...               | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Beau Bassin & Rose Hill.. | 76              | 30                                                                                    | 46                              | 244                    | ... | ...                        | ...                | ...               | 528                | ...                | ...                | 824                 | ...                | ...                | 12                | ...               | ...              | ...             | ...               | 5                | ...                  |  |
| Moka ...                  | 35              | 1                                                                                     | 34                              | 228                    | ... | 1                          | 26                 | ...               | 190                | 10                 | 2                  | 14                  | 60                 | ...                | ...               | ...               | ...              | ...             | ...               | ...              | ...                  |  |
| Total                     | 1563            | 193                                                                                   | 1370                            | 3545                   | 96  | 7                          | 109                | 2                 | 2540               | 68                 | 237                | 2924                | 254                | 1                  | 9                 | 77                | 1                | 7               | 5                 | 6                | 172                  |  |

## DETAILS OF

| Sections.                 | Regn. 63 of 1875. | Regn. 107 of 1876. | Regn. 96 of 1877. | Regn. 97 of 1877. | Ordce. 12 of 1878. | Regn. 148 of 1878. | Regn. 185 of 1879. | Regn. 134 of 1883. | Regn. 162 of 1885. | Ordce. 9 of 1889. | Ordce. 67 of 1885. | Regn. 234 of 1883. | Regn. 332 of 1-91. | Regn. 189 of 1892. | Regn. 263 of 1893. |
|---------------------------|-------------------|--------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Pamplemousses—Lower       | ...               | ...                | 1                 | ...               | ...                | 2                  | 1                  | 1                  | ...                | 2                 | 3                  | ...                | ...                | 3                  | ...                |
| „ —Upper                  | 8                 | ...                | ...               | ...               | 30                 | 2                  | 2                  | 1                  | 5                  | 1                 | 5                  | ...                | ...                | 14                 | ...                |
| Rivière du Rempart ...    | ...               | ...                | ...               | ...               | 28                 | ...                | 37                 | 3                  | 11                 | 2                 | ...                | ...                | ...                | ...                | ...                |
| Flacq—Northern            | 5                 | ...                | ...               | ...               | 53                 | ...                | 47                 | ...                | 6                  | ...               | ...                | ...                | ...                | ...                | ...                |
| „ —Southern               | 3                 | ...                | 3                 | ...               | ...                | 1                  | 32                 | ...                | 6                  | ...               | ...                | ...                | ...                | ...                | ...                |
| Rose Belle ...            | ...               | ...                | ...               | ...               | 17                 | ...                | 28                 | ...                | 21                 | ...               | ...                | ...                | ...                | ...                | ...                |
| Grand Port...             | ...               | 13                 | 1                 | ...               | 6                  | ...                | 49                 | ...                | 102                | ...               | 12                 | 1                  | 3                  | 30                 | ...                |
| Savanne ...               | 3                 | ...                | 2                 | ...               | 5                  | ...                | 121                | ...                | 109                | 1                 | ...                | ...                | ...                | ...                | ...                |
| Black River               | ...               | 2                  | ...               | ...               | 26                 | 1                  | ...                | ...                | 28                 | ...               | ...                | 3                  | ...                | ...                | ...                |
| Curepipe ...              | 25                | ...                | ...               | ...               | ...                | ...                | ...                | ...                | ...                | 1                 | 15                 | ...                | 11                 | 29                 | ...                |
| Vacoas ...                | ...               | 4                  | ...               | ...               | 5                  | 2                  | 7                  | 1                  | 10                 | 1                 | 10                 | 8                  | ...                | ...                | ...                |
| Quatre Bornes             | ...               | ...                | ...               | ...               | 25                 | 1                  | 1                  | ...                | 38                 | 1                 | ...                | 1                  | ...                | ...                | ...                |
| Beau Bassin & Rose Hill.. | ...               | ...                | ...               | ...               | ...                | 1                  | ...                | 3                  | 33                 | 9                 | 6                  | ...                | 5                  | ...                | ...                |
| Moka ...                  | 7                 | 1                  | ...               | ...               | ...                | 2                  | 11                 | 1                  | 2                  | ...               | 2                  | 7                  | ...                | ...                | ...                |
| Total                     | 51                | 20                 | 7                 | ...               | 195                | 12                 | 336                | 10                 | 371                | 18                | 53                 | 20                 | 19                 | 76                 | ...                |



DISTRICTS.  
Department.  
COLLECTIONS, &c., FOR THE YEAR 1906.

|                |                    |                                                    | ABATTOIRS.       |     |                 |                |                                                |       |         |        |        |        | CEMETERIES. |                 |                | MARKETS.                  |                 | ABATTOIR. |        | Notices served.           |      |                 |     |                    |                    |
|----------------|--------------------|----------------------------------------------------|------------------|-----|-----------------|----------------|------------------------------------------------|-------|---------|--------|--------|--------|-------------|-----------------|----------------|---------------------------|-----------------|-----------|--------|---------------------------|------|-----------------|-----|--------------------|--------------------|
| Complied with. | Not complied with. | No. of parties prosecuted for non compliance with. | Amount of Fines. |     | No. of Private. | No. of Public. | No. of animals killed in each Public Abattoir. |       |         |        |        |        |             | No. of Private. | No. of Public. | No. of burials in public. | Fees collected. |           | No. of | Amount of Fees collected. |      | Fees collected. |     | Regn. 177 of 1883. | Regn. 498 of 1900. |
|                |                    |                                                    | Rs.              | c.  |                 |                | Oxen.                                          | Cows. | Calves. | Swine. | Goats. | Sheep. | Heifers.    |                 |                |                           | Rs.             | c.        |        | Rs.                       | c.   |                 |     |                    |                    |
| 251            | 24                 | 24                                                 | 36               | ... | 1               | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 9           | 1               | 2746           | 5332                      | 85              | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 274            | 23                 | 23                                                 | 55               | ... | 1               | 112            | 25                                             | 107   | ...     | ...    | ...    | ...    | 2           | ...             | ...            | ...                       | ...             | 1         | 217    | 70                        | 556  | 50              | ... | ...                |                    |
| 204            | 21                 | 18                                                 | 66               | ... | ...             | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 15          | 3               | 684            | 1383                      | ...             | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 332            | 10                 | 4                                                  | 41               | ... | ...             | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 13          | 1               | 258            | 282                       | 50              | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 406            | 1                  | 1                                                  | 10               | ... | ...             | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 3           | 2               | 857            | 1919                      | ...             | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 593            | 61                 | 61                                                 | 35               | 80  | 3               | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 5           | 1               | 671            | 1403                      | ...             | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 511            | 22                 | 10                                                 | 19               | 95  | 1               | 125            | 87                                             | 92    | 248     | 89     | 1      | ...    | 5           | 1               | 447            | 838                       | ...             | 1         | 1548   | 70                        | 1288 | 50              | ... | ...                |                    |
| 678            | 115                | 115                                                | 208              | 25  | 2               | 1              | 102                                            | 65    | 82      | ...    | ...    | 15     | 4           | 3               | 1105           | 2255                      | 50              | ...       | ...    | ...                       | 611  | 50              | ... | ...                |                    |
| 131            | 27                 | 27                                                 | 25               | 30  | 1               | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 6           | 3               | 503            | 868                       | ...             | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 1349           | 170                | 28                                                 | 45               | 25  | 1               | 1190           | 153                                            | 22    | ...     | 323    | 6      | ...    | 1           | ...             | ...            | ...                       | ...             | 1         | 2335   | ...                       | ...  | ...             | 455 | 1                  |                    |
| 285            | 7                  | 7                                                  | 25               | ... | 1               | ...            | 160                                            | 9     | 36      | 68     | ...    | 1      | ...         | 2               | 1              | 1041                      | 1946            | ...       | ...    | ...                       | ...  | ...             | ... |                    |                    |
| 100            | 51                 | 2                                                  | ...              | ... | ...             | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 1           | ...             | ...            | ...                       | ...             | ...       | ...    | ...                       | ...  | ...             | ... |                    |                    |
| 1256           | 3                  | 3                                                  | 12               | ... | 1               | 1123           | 261                                            | 181   | 425     | 771    | 3      | ...    | 1           | 2               | 698            | 888                       | ...             | 2         | 1115   | 05                        | ...  | ...             | ... | ...                |                    |
| 279            | 24                 | 24                                                 | 131              | ... | 1               | ...            | ...                                            | ...   | ...     | ...    | ...    | ...    | 8           | 2               | 969            | 1598                      | ...             | ...       | ...    | ...                       | ...  | ...             | ... | ...                |                    |
| 6649           | 559                | 347                                                | 710              | 55  | 10              | 42812          | 600                                            | 520   | 741     | 1183   | 11     | 15     | 74          | 21              | 9979           | 18718                     | 85              | 5         | 5216   | 45                        | 2456 | 50              | 455 | 1                  |                    |

CONTRAVENTIONS.

| Ordee. 32 of 1894-95. | Regn. 130 of 1898. | Ordee. 8 of 1898. | Regn. 25 of 1900. | Regn. 167 of 1900. | Regn. 434 of 1900. | Ordee. 4 of 1900. | Regn. 65 of 1903. | Regn. 79 of 1882. | Regn. 498 of 1900. | Regn. 65 of 1885. | Regn. 42 of 1898. | Regn. 35 of 1863. | Regn. 155 of 1905. | Regn. 67 of 1885. | Regn. 6 of 1896. | Regn. 177 of 1883. | Regn. 25 of 1900. | Regn. 68 of 1876. | Regn. 6 of 1888. | Regn. 154 of 1905. | Ordee. 39 of 1881. | Total amount of Fines. |     |
|-----------------------|--------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|-------------------|-------------------|--------------------|-------------------|------------------|--------------------|-------------------|-------------------|------------------|--------------------|--------------------|------------------------|-----|
|                       |                    |                   |                   |                    |                    |                   |                   |                   |                    |                   |                   |                   |                    |                   |                  |                    |                   |                   |                  |                    |                    | Rs.                    | c.  |
| 10                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | 1                  | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 42                     | ... |
| ...                   | ...                | ...               | ...               | ...                | ...                | ...               | 1                 | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 124                    | ... |
| 46                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 334                    | ... |
| 20                    | ...                | ...               | ...               | ...                | ...                | ...               | 4                 | ...               | ...                | ...               | 4                 | 1                 | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 131                    | 75  |
| 11                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 121                    | ... |
| 75                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | ...               | 4                  | 5                 | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 378                    | 43  |
| 34                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | 6                 | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 391                    | 17  |
| 29                    | ...                | ...               | 2                 | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | ...               | ...                | ...               | 1                | ...                | ...               | ...               | ...              | ...                | ...                | 424                    | 25  |
| 12                    | ...                | ...               | ...               | ...                | ...                | ...               | ...               | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 143                    | 35  |
| ...                   | ...                | ...               | ...               | ...                | ...                | ...               | 1                 | ...               | 1                  | ...               | ...               | ...               | ...                | ...               | ...              | 59                 | 5                 | 1                 | ...              | ...                | ...                | 488                    | 26  |
| 7                     | 1                  | ...               | ...               | ...                | ...                | ...               | ...               | ...               | 2                  | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | 3                 | ...              | ...                | ...                | 260                    | 50  |
| 2                     | ...                | ...               | ...               | ...                | ...                | ...               | 3                 | ...               | 1                  | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | 1                  | 1                  | 235                    | 25  |
| 17                    | ...                | ...               | ...               | ...                | 1                  | ...               | 1                 | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 244                    | ... |
| ...                   | ...                | ...               | ...               | ...                | 1                  | 1                 | ...               | ...               | ...                | ...               | ...               | ...               | ...                | ...               | ...              | ...                | ...               | ...               | ...              | ...                | ...                | 228                    | ... |
| 263                   | 1                  | ...               | 2                 | ...                | 2                  | 1                 | 10                | ...               | 5                  | 4                 | 1                 | 6                 | 4                  | 5                 | 1                | 59                 | 5                 | 1                 | 3                | 1                  | 1                  | 3545                   | 96  |

F.J.R. MOMPLÉ,  
Acting Assistant Director.

## ANNEXURE VIII.

**Annual Report on the Civil Hospital for the year 1906.**

1. The following table gives the admissions and deaths for the last ten years. The number of admissions was fewer by 441 and that of deaths by 53 than in 1905, notwithstanding the epidemic of Influenza which raged in July :—

TABLE I.

| Years. | Admissions. | Deaths. |
|--------|-------------|---------|
| 1897   | 5039        | 320     |
| 1898   | 5658        | 356     |
| 1899   | 5230        | 418     |
| 1900   | 5260        | 410     |
| 1901   | 5554        | 509     |
| 1902   | 6092        | 428     |
| 1903   | 6062        | 520     |
| 1904   | 5573        | 379     |
| 1905   | 6225        | 457     |
| 1906   | 5784        | 404     |

2. Table II gives the number of European, Creole and Asiatic patients admitted in 1906 as compared with the two preceding years.

TABLE II.

| Nationalities. | 1904 | 1905 | 1906 |
|----------------|------|------|------|
| Europeans ...  | 149  | 113  | 86   |
| Creoles ...    | 3710 | 4121 | 3916 |
| Asiatics ...   | 1714 | 1991 | 1782 |
| Total ...      | 5573 | 6225 | 5784 |

The number of European, Creole and Asiatic patients was fewer by 27,205 and 209 respectively as compared with the previous year.

3. Table III classifies the admissions according to their respective designations and the districts from which they came.



TABLE III.

| Districts.          | Paupers. | Private Patients. | Police Force. | Prison Warders. | Police Cases. | Port Department. | Non-paying Patients. | Total. | Deaths. |
|---------------------|----------|-------------------|---------------|-----------------|---------------|------------------|----------------------|--------|---------|
| Port Louis.         | 3674     | 482               | 399           | 63              | 106           | 28               | 470                  | 5222   | 331     |
| Pamplemousses.      | 166      | ...               | 17            | ...             | ...           | ...              | ...                  | 183    | 38      |
| Rivière du Rempart. | ...      | ...               | 6             | ...             | ...           | ...              | ...                  | 6      | 3       |
| Flacq               | ...      | 3                 | 8             | ...             | ...           | ...              | ...                  | 11     | 3       |
| Moka                | 194      | 3                 | 11            | ...             | ...           | ...              | ...                  | 208    | 19      |
| Plaines Wilhems.    | 14       | 3                 | 95            | ...             | ...           | ...              | ...                  | 112    | 4       |
| Grand Port.         | 2        | ...               | 1             | ...             | ...           | ...              | ...                  | 3      | 1       |
| Savanne             | 1        | 3                 | 10            | ...             | ...           | ...              | ...                  | 14     | 2       |
| Black River.        | 1        | ...               | 24            | ...             | ...           | ...              | ...                  | 25     | 3       |
| Total               | 4052     | 494               | 571           | 63              | 106           | 28               | 470                  | 5784   | 404     |

There were 5,222 admissions from Port Louis with 331 deaths, and 562 admissions from country districts with 73 deaths, the death-rate being 4.2 per cent for the town patients, and 12.7 per cent for those coming from the country. The great difference is due to the fact, that country patients are often in a precarious condition on admission.

4. The total number of patients treated was 5,952, of whom 4,218 were males and 1,734 females.

The daily average number in hospital was lower than last year, but higher than in 1904, as can be seen from the following table :—

TABLE IV.

| Years. | Daily average number in Hospital. |          |        |
|--------|-----------------------------------|----------|--------|
|        | Males.                            | Females. | Total. |
| 1904   | 137                               | 63       | 200    |
| 1905   | 160                               | 67       | 227    |
| 1906   | 141                               | 64       | 205    |

5. Table V is a summary of admissions, discharges and deaths in 1906.

TABLE V.

|                                      | Males. | Females. | Total. |
|--------------------------------------|--------|----------|--------|
| Number remaining at the end of 1905. | 129    | 39       | 168    |
| Number admitted in 1906              | 4089   | 1695     | 5784   |
| Total number treated                 | 4218   | 1734     | 5952   |
| Total number discharged              | 2365   | 784      | 3149   |
| { Cured                              | 1329   | 380      | 1709   |
| { Relieved                           | 156    | 409      | 565    |
| { Not Improved                       |        |          |        |
| Number died                          | 283    | 121      | 404    |
| Remaining at the end of 1906.        | 85     | 40       | 125    |

Patients discharged without improvement consist of chronic and incurable cases, who are sent to Poor Law Infirmarys or leave the hospital at their own request, the hospital being reserved for patients who require active treatment.

6. The rate of mortality was practically the same as that of last year.

TABLE VI.

| Years. | Number of patients treated. | Number of deaths. | Death-rate per cent of patients. |
|--------|-----------------------------|-------------------|----------------------------------|
| 1904   | 5715                        | 379               | 6.6                              |
| 1905   | 6351                        | 457               | 7.2                              |
| 1906   | 5784                        | 404               | 6.9                              |

128 Patients admitted in a moribund condition, died in less than 72 hours after admission.

TABLE VII.

| Died within 24 hours. | Died between 24 and 48 hours. | Died between 48 and 72 hours. | Total No. who died within 72 hours. |
|-----------------------|-------------------------------|-------------------------------|-------------------------------------|
| 50                    | 39                            | 39                            | 128                                 |

7. Table VIII shows the relative frequency and mortality of the most important diseases for the last three years.

There was a large increase in cases of Influenza and Pneumonia. The death-rate of Pneumonia was 33.4 % in 1906 against 35.8 % in 1905. The death-rate of Influenza was far lower, 1.1 % in 1906 as compared with 5 % in 1905, this difference is accounted for, not by the method of treatment, but by the classification of this disease, mild attacks of bronchitis and feverish cold being classified as Influenza, and also by the fact that Malarial Fever was more prevalent in 1905, patients being consequently in poorer health and more susceptible to the influence of Influenza.

Influenza started in June and raged in July, the epidemic



diminished gradually in intensity and by the month of October it had practically worn itself out. There were 533 cases of Influenza and 215 of Pneumonia against 347 and 131 respectively in the previous year.

Many cases of apical Pneumonia and a few of Pericarditis were noticed as a complication of Influenza.

The mode of onset of Influenza was peculiar this year, the disease frequently beginning with a sharp rigor and rise of temperature, simulating a typical attack of Malarial Fever,—the diagnosis between the two diseases making itself apparent only a few days later by the occurrence of symptoms characteristic of Influenza.

TABLE VIII.

| Diseases.              | Cases. |      |      | Deaths. |      |      | Case-mortality per cent. |      |      |
|------------------------|--------|------|------|---------|------|------|--------------------------|------|------|
|                        | 1904   | 1905 | 1906 | 1904    | 1905 | 1906 | 1904                     | 1905 | 1906 |
| Malaria ...            | 813    | 1558 | 1031 | 8       | 37   | 9    | .98                      | 2.3  | .87  |
| Tuberculosis ...       | 543    | 481  | 444  | 112     | 94   | 111  | 20.6                     | 19.5 | 25.  |
| Influenza ...          | 332    | 347  | 533  | 6       | 19   | 6    | 1.8                      | 5.   | 1.1  |
| Dysentery ...          | 154    | 228  | 258  | 40      | 56   | 54   | 26.5                     | 24.5 | 20.9 |
| Plague ...             | 47     | 30   | 30   | 20      | 9    | 15   | 42.5                     | 30.  | 50.  |
| Beri-Beri ...          | 16     | 20   | 12   | 3       | 7    | 1    | 18.7                     | 35.  | 8.3  |
| Syphilis ...           | 149    | 163  | 180  | 1       | 2    | 2    | 1.3                      | 1.2  | 1.1  |
| Anæmia ...             | 170    | 152  | 106  | 2       | 3    | 3    | 1.17                     | 2.   | 28.3 |
| Debility ...           | 151    | 174  | 128  | 54      | 35   | 33   | 36.                      | 20.1 | 25.7 |
| Tropical Phagedæna ... | 373    | 91   | 95   | 1       | ...  | ...  | 26.                      | ...  | ...  |
| Bronchitis ...         | 301    | 309  | 289  | 3       | 3    | 4    | 1.                       | 1.1  | 1.3  |
| Pneumonia ...          | 95     | 131  | 215  | 21      | 46   | 72   | 22.1                     | 35.8 | 33.4 |
| Bright's disease.      | 120    | 136  | 98   | 22      | 30   | 21   | 18.3                     | 22   | 21.4 |
| Rheumatism ...         | 190    | 146  | 154  | ...     | 1    | ...  | .53                      | .6   | ...  |
| Injuries ...           | 323    | 556  | 295  | 7       | 15   | 6    | 2.1                      | 4.2  | 2.   |
| Ankylostomiasis...     | ...    | ...  | 11   | ...     | ...  | 1    | ...                      | ...  | 9.   |
| Erysipelas ...         | ...    | ...  | 27   | ...     | ...  | 3    | ...                      | ...  | 11.1 |

8. The year under review shows a lower prevalence of Malarial Fever. There is a decrease in the number of cases of Tuberculosis. The cases of Plague were numerically the same as in the previous year.

Tropical sloughing Phagedæna prevailed to the same extent as last year.

TABLE IX.

|                   | Admissions. |      |      | Deaths. |      |      |
|-------------------|-------------|------|------|---------|------|------|
|                   | 1904        | 1905 | 1906 | 1904    | 1905 | 1906 |
| First Quarter ... | 1493        | 2034 | 1584 | 77      | 118  | 89   |
| Second „ ...      | 1547        | 1653 | 1634 | 88      | 127  | 103  |
| Third „ ...       | 1375        | 1413 | 1512 | 105     | 120  | 130  |
| Fourth „ ...      | 1158        | 1125 | 1054 | 109     | 92   | 82   |
|                   | 5573        | 6225 | 5784 | 379     | 457  | 404  |

It results from the above figures that the morbidity was highest in the second quarter and the mortality greatest in the third quarter.

9. Table X shows at a glance the comparative prevalence of the most important diseases in the different months of the year.

TABLE X.

| Months.       | Malaria. | Hypertrophy<br>of Spleen. | Anæmia. | Debility. | Dysentery. | Rheumatism. | Tuberculosis. | Influenza. | Bronchitis. | Pneumonia. | Plague. | Tropical<br>Phagedæna. |
|---------------|----------|---------------------------|---------|-----------|------------|-------------|---------------|------------|-------------|------------|---------|------------------------|
| January ...   | 90       | 8                         | 10      | 9         | 24         | 20          | 33            | ...        | 26          | 11         | ...     | 9                      |
| February ..   | 135      | 8                         | 20      | 10        | 19         | 12          | 39            | 1          | 21          | 8          | 1       | 15                     |
| March ...     | 136      | 34                        | 8       | 21        | 29         | 11          | 38            | 1          | 50          | 18         | 2       | 12                     |
| April ...     | 159      | 8                         | 7       | 11        | 35         | 13          | 41            | ...        | 26          | 5          | ...     | 20                     |
| May ...       | 149      | 17                        | 10      | 8         | 34         | 9           | 36            | 13         | 33          | 15         | ...     | 10                     |
| June ...      | 91       | 10                        | 2       | 10        | 18         | 19          | 29            | 96         | 20          | 26         | ...     | 5                      |
| July ...      | 16       | 1                         | 4       | 9         | 19         | 6           | 53            | 303        | 16          | 84         | 1       | 3                      |
| August ..     | 47       | 1                         | 4       | 16        | 21         | 11          | 30            | 58         | 15          | 10         | 1       | 4                      |
| September ... | 39       | 1                         | 7       | 13        | 21         | 12          | 37            | 46         | 15          | 13         | 6       | 1                      |
| October ...   | 50       | 5                         | 11      | 7         | 16         | 11          | 23            | 4          | 16          | 7          | 8       | 4                      |
| November ...  | 68       | 4                         | 14      | 6         | 10         | 15          | 36            | 10         | 11          | 6          | 6       | 8                      |
| December ...  | 42       | 2                         | 5       | 6         | 6          | 15          | 23            | 1          | 27          | 5          | 5       | 2                      |
| Total ...     | 1022     | 99                        | 102     | 126       | 252        | 154         | 418           | 533        | 276         | 208        | 30      | 93                     |

The greatest number of admissions for Malaria was obtained in April, and May came next. Dysentery prevailed chiefly in April and May. Cases of Tropical Phagedæna were less frequent during the second half year, but the disease had by no means completely died out.

10. *Malaria.*

TABLE XI.

*Return of Malarial Fever.*

| Types.                 | No. of Admissions. |       |       | No. of Deaths. |       |       |
|------------------------|--------------------|-------|-------|----------------|-------|-------|
|                        | 1904.              | 1905. | 1906. | 1904.          | 1905. | 1906. |
| <i>Intermittent</i> :— |                    |       |       |                |       |       |
| Quotidian ..           | 312                | 708   | 646   | ...            | 3     | 1     |
| Tertian ...            | 24                 | 96    | 17    | ...            | ...   | ...   |
| Quartan ...            | 4                  | 23    | 4     | ...            | ...   | ...   |
| Irregular ..           | 7                  | 56    | 2     | ...            | ...   | ...   |
| Type undiagnosed       | 407                | 488   | 315   | ...            | ...   | ...   |
| <i>Remittent</i> ...   | 48                 | 130   | 22    | 5              | 6     | 3     |
| <i>Pernicious</i> ...  | 5                  | 48    | 16    | 3              | 28    | 5     |
| Total ...              | 807                | 1549  | 1022  | 8              | 37    | 9     |

The cases of Malaria showed a decrease.

The types of the disease are not properly classified. Microscopical examinations of blood films are not made in every case,



when they are made and plasmodia not found, it is difficult to classify the type of Fever, the great majority of the cases came under the irregular remittent type and are returned as quotidian or malignant tertian. Quartan Fever is rare ; but the Tertian type fairly common, the types most frequently met with being the mixed variety and the malignant tertian.

Although Malaria is the curse of the Island, many deaths do not actually occur in hospital through this disease. What it does, however, is to lower the vitality of the patient to such an extent that he has no reserve power to fight other diseases which affect him, such as Pneumonia and Dysentery in particular.

Nine deaths occurred from Malaria. When patients have previously been under the influence of chronic intoxication from the malarial poison, they often collapse very quickly under a sharp rise of temperature caused by a fresh attack of fever.

11. A case of Hæmoglobinuric Fever came under the notice of the Police and Prison Surgeon :—A man aged 35 years suffered frequently from Malarial Fever, and he has experienced attacks of black water fever on 4 occasions during the few years preceding the present attack.

He had taken quinine irregularly. This man was admitted into hospital on November 10th. suffering from Malarial Fever, his temperature was  $37^{\circ}.8$  c. in the afternoon, he was then ordered Bromide of Quinine by the month, 0.50 cgr. every six hours.

On the two following days November 11th. and 12th. the fever continued with remissions, falling to  $37.3$  c. in the morning, and rising to 39 in the evening ; on the latter day, the patient taking quinine all the time, passed urine characteristic of Hæmoglobinuria. The quinine was stopped at once, Fluid extract of Cinchona was substituted for it, the patient was encouraged to drink fluids in abundance, hypodermic injections of normal saline fluid were made on two occasions, and within 24 hours he was convalescent.

This case would hardly be worth recording if it were not to call attention to certain facts, viz :— (1) Hæmoglobinuric Malarial Fever occurs in patients who have taken quinine recently whilst under the influence of malarial fever.

(2) These patients get well notwithstanding that quinine is withdrawn from the treatment.

(3) If diuresis is free, the patient invariably gets well whatever the treatment employed. It is important to bear these facts in mind, when one is called upon to treat this much dreaded complication.

12. The cases of Dysentery show an increase of 26 ; the deaths a decrease of 2.

The death-rate of the acute cases was 3.4 o/o. The death-rate of the chronic cases was 51 o/o.

TABLE XII.

|                      | Cases. |       |       | Deaths. |       |       |
|----------------------|--------|-------|-------|---------|-------|-------|
|                      | 1904.  | 1905. | 1906. | 1904.   | 1905. | 1906. |
| Acute Dysentery ...  | 67     | 133   | 176   | 1       | 8     | 6     |
| Chronic Dysentery... | 82     | 93    | 76    | 39      | 48    | 48    |
|                      | 149    | 226   | 252   | 40      | 56    | 54    |



It is not surprising that the death-rate of chronic Dysentery reaches such a high figure if it is borne in mind that the majority of these cases occur in old people, and in persons who are labouring under a marked degree of debility through chronic malarial poisoning.

The treatment of Dysentery which has given me the best results is the so-called Indian method of administering Ipecacuanha. Three grammes of the powdered drug mixed with 15 minims of Tincture of Opium are made into three large pills which are given fasting in the early morning, a mustard poultice is then applied to the pit of the stomach and the patient allowed no food for 4 or 5 hours.

The opium and mustard prevent vomiting or considerably modify its intensity. This treatment is kept up for 3 days, it is then followed by a decoction of 25 grammes of the powdered Indian drug called "Anderjoa". If the disease does not improve Ipecacuanha is again administered until the stools contain no more mucus or blood. In a few cases, I have given, after the three days of Ipecacuanha, the seeds called "Kho-Sam" very kindly placed at my disposal by Dr. Chanvin, this new drug has appeared to me to be very valuable in the treatment of this disease.

I attach great importance to the diet, no meat, fish or fats are allowed until convalescence has well set in.

13. *Ankylostomiasis* :—Eleven cases were noticed and many more would have been detected if carefully looked for, with a little practice the disease can be diagnosed by the intense anæmia, no morbid condition seems to discolour the mucous membranes so much, not even hæmorrhage, the examination of the stools for the eggs of the parasites should, however, be made in every case. The treatment adopted was thymol, 2 grammes every 2 hours for 3 doses followed by a brisk saline purgative.

The disease is difficult to eradicate and in some cases the treatment had to be applied as often as six times, at an interval of a few days, before the eggs disappeared from the stools, no ill effects were noticed from this drug and the usual precautions as to its administration were followed, viz :—withholding oily purgatives and alcoholic drinks, besides preventing the patient from rising from his bed except for the purpose of going to stool.

14. *Plague* :—There were 30 cases of Plague, exactly the same number as last year. Fifteen of these cases died, they were too ill to be removed to the Plague Hospital.

6 died in less than 6 hours after admission

|   |   |   |    |   |   |   |
|---|---|---|----|---|---|---|
| 1 | " | " | 10 | " | " | " |
| 1 | " | " | 18 | " | " | " |

The others lived for 31 hours to 9 days after admission.

I tried the serum treatment in two cases with disastrous results.

Case I :—H. F., Chinaman aged 53, was admitted at 2 p.m. in a delirious condition. Pulse 156. Temperature 39° c. He showed a left inguinal bubo. The case appeared favourable for serum treatment, the general condition being fairly good. On admission 140. c. c. of plague serum were injected intravenously; 1 c. c. of Camphorated oil, 0.25 cgr. Caffeine and 0.005 milligr. Strychnine were injected subcutaneously.

The patient got gradually weaker and died at 6.45 p. m. the same day, he did not appear very ill and his death surprised me. I cannot help thinking that in both this case and the next the serum had a toxic effect upon the heart.

Case II :—G. A. male, créole, aged 90, although delirious,

patient can answer questions, he says the left inguinal bubo which he presents made its appearance 4 days ago.

He is admitted at 9 a. m. Pulse 100, weak. Temperature,  $38.8^{\circ}\text{C}$  and at 10 a. m. 120. c. c. plague serum are injected intravenously. He gets gradually weaker and dies at noon the same day.

The cases of Plague which came under our notice were classified as follows :—

|             |     |     |     |     |    |
|-------------|-----|-----|-----|-----|----|
| Bubonic     | ... | ... | ... | ... | 21 |
| Pneumonic   | ... | ... | ... | ... | 7  |
| Carbuncular | ... | ... | ... | ... | 1  |
| Septicæmic  | ... | ... | ... | ... | 1  |

A case of Pneumonic Plague recovered, this is such a rare event that the following remarks will be read with interest :—

R., Indian, male, aged 29 years, admitted on the 2nd. day of illness with typical symptoms of Plague Pneumonia. The sputum is examined on the day of admission and again on two successive days, it is found teeming with plague bacilli.

On admission the patient is delirious, his pulse is weak, the temperature is  $40^{\circ}\text{C}$ ., the day after he suffers from epistaxis, the temperature, to our surprise, falls to  $37.8$ , there is still marked weakness.

On the third day of admission the temperature falls to normal in the morning; but in the evening it rises to  $38.4^{\circ}$ , he again suffers from epistaxis. The fever does not exceed  $38.5$  on the next day, from this time it keeps fairly low until the 10th. day when it becomes permanently normal.

The patient was discharged 14 days after his admission. He was treated with tonics and stimulants.

This case shows that plague pneumonia may sometimes run a mild or abortive course. The lungs presented disseminated foci of inflammation, no marked consolidation as is usual in this disease, the sputum had the characteristic bloody appearance.

15. The following table gives the various diseases returned under the name of Tuberculosis :—

|                        | Cases. | Deaths. |
|------------------------|--------|---------|
| Pulmonary tuberculosis | 418    | 107     |
| Tubercular enteritis   | 7      | 2       |
| Tuberculosis of bone   | 4      | 1       |
| Tubercular Arthritis   | 1      | ...     |
| Tuberculosis of glands | 13     | 1       |
| Tubercular meningitis  | 1      | ...     |
| Total                  | 444    | 111     |

The decrease of the cases of Tuberculosis noticed last year is again noticed this year. There were 418 admissions as against 465 in 1905 and 522 in 1904.

The death-rate, however, is higher 25% against 19.5 in 1905.

16. *Enteric Fever*. Three cases were admitted, they occurred amongst sailors in the harbour. The treatment was the usual one, first tepid then cold douching with a watering can every 3 or 4 hours if the temperature rose to  $38.5^{\circ}$  or  $39^{\circ}\text{C}$ . besides strict dieting.



The patient is kept recumbent in bed and the latter protected by mackintosh sheeting, the water which drains away is collected in a receptacle placed on the floor. I find this method more effective than cold sponging and far easier to apply than the more usual one of placing the patient in a bath. The three cases recovered.

17. *Erysipelas*. 27 cases were treated, 8 developed in hospital and 19 were admitted with the disease. Of the eight cases which developed in hospital, two died.

It is difficult to account for the cases which originated in the wards, they occurred sporadically in Ward VII situated in the upper story of the building.

18. *Beri-Beri*. Ten cases of this disease were admitted against 20 in 1905. Seven occurred in Chinamen, 2 in Creoles, and 1 in an Indian.

The disease, peculiarly enough, is endemic among the Chinese only, I hardly ever see a case in people of other races, it occurs epidemically on board vessels calling at Mauritius, such an outbreak happened last year, it was reported by Dr. Rouget.

Cases are seen among the Chinese all the year round, the disease does not occur epidemically. The form which is most common is the dry type with a moderate degree of *Cedema* of the legs.

The prevalence of the disease among the Chinese is probably due to the fact that they have a taste for delicacies imported from their native land, these consist of pickles and salted foods in a partial condition of putrefaction, a taste which is not shared by other races. These foods probably contain some toxic material or a specific microorganism which is the cause of the malady.

They also eat Chinese rice almost exclusively, this rice as is well known is decorticated. The Indian population who do not suffer from the disease eat Indian rice.

The course of the disease is essentially chronic; paralysis of the diaphragm and intercostals is a fairly common occurrence. But death is caused almost invariably by cardiac failure, Symptoms of asystoly and cardiac dilatation supervene upon a previous excitable action of the heart and the patient dies asphyxiated with marked breathlessness and disappearance of the pulse at the wrist.

The treatment which is found to be the most successful is that which is prescribed for *Cedema*, withholding salt and prescribing a milk diet with some farinaceous food until all *Cedema* has disappeared and the heart's action quieted down.

Diuretics such as Theobromine are valuable, very small tonic doses of cristallized Digitaline or injections of Camphorated oil moderate the action of the heart. Strychnine should on no account be prescribed until convalescence has well set in.

When the case is doing badly, vomiting is often observed, this symptom, coupled with the abnormal action of the heart, indicates the toxic effect of some poison on the medulla.

19. *Syphilis*. The following table gives the admissions of the last five years. The disease is gradually on the increase.

TABLE XIV.

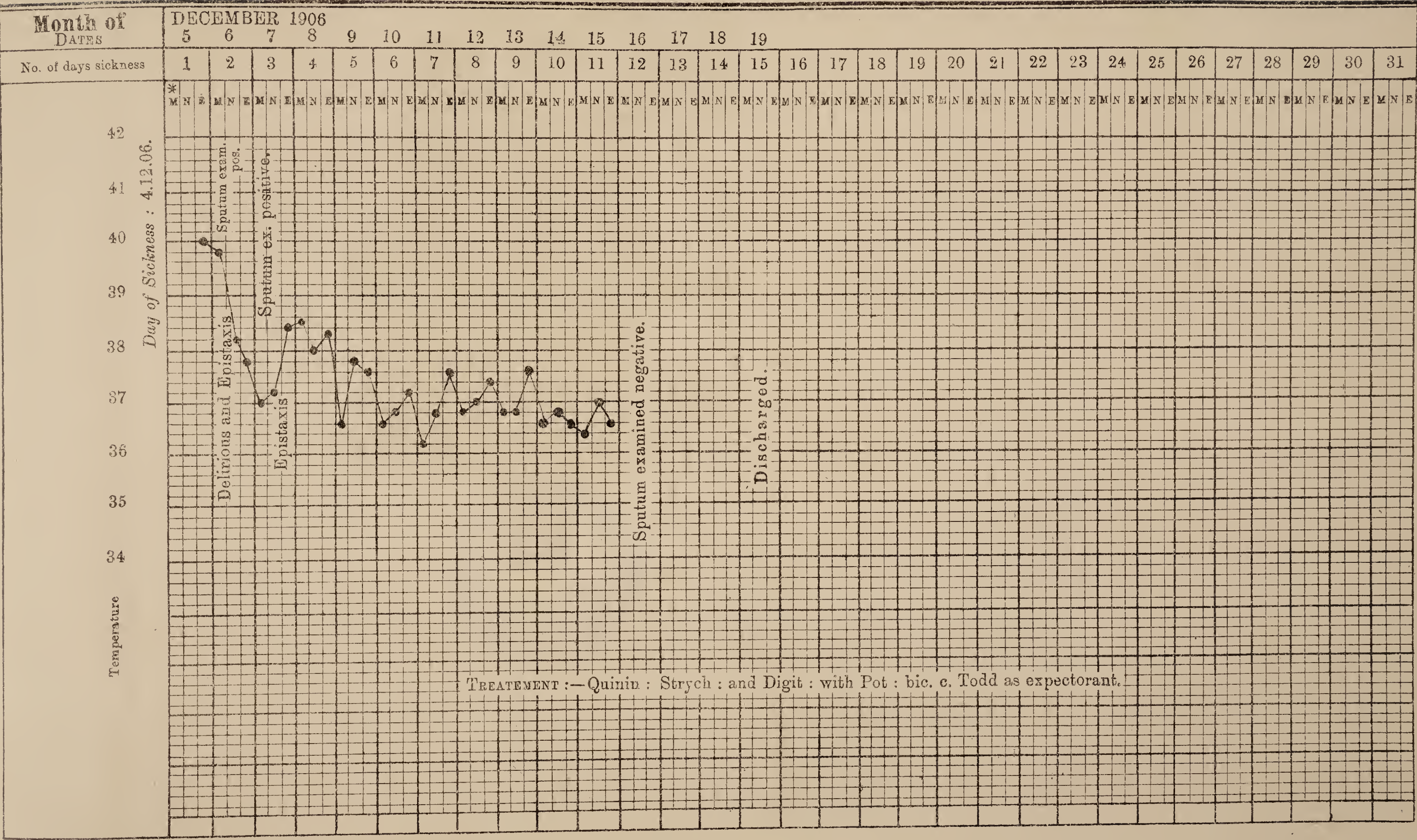
| Years. |     | Cases. |
|--------|-----|--------|
| 1902   | ... | 110    |
| 1903   | ... | 128    |
| 1904   | ... | 142    |
| 1905   | ... | 154    |
| 1906   | ... | 175    |



CIVIL HOSPITAL.

NAME OF PATIENT : RAMCHUNDAR.      SEX : Male.      AGE : 20 years.

DIAGNOSIS : Plague Pneumonia.—Specimen examined positive. Plague bacilli in great number.



\* M—Morning  
N—Noon  
E—Evening





The total number of cases treated was 180, classified as follows :—

TABLE XV.

|                  | Cases. | Deaths. |
|------------------|--------|---------|
| Inherited ... .. | 4      | ...     |
| Primary ... ..   | 58     | ...     |
| Secondary ... .. | 48     | ...     |
| Tertiary ... ..  | 70     | 2       |
|                  | 180    | 2       |

20.

TABLE XVI.

*Return of Injuries.*

| Injuries.                  | Cases. | Deaths. | Remarks. |
|----------------------------|--------|---------|----------|
| (a) <i>General</i> :       |        |         |          |
| Burns ... ..               | 3      | 1       |          |
| Shock from :—Wound...      | 1      | 1       |          |
| " Drowning                 | 1      | ...     |          |
| (b) <i>Local</i> :         |        |         |          |
| Burns and scalds ...       | 5      | ...     |          |
| Bruise ... ..              | 105    | ...     |          |
| Wounds ... ..              | 122    | 3       |          |
| Sprain ... ..              | 13     | ...     |          |
| <i>Dislocation of</i> .    |        |         |          |
| Radius and Ulna (El-       | 1      | ...     |          |
| bow).                      |        |         |          |
| Radius (wrist) ...         | 1      | ...     |          |
| Thumb ... ..               | 1      | ...     |          |
| Big Toe ... ..             | 1      | ...     |          |
| Hip ... ..                 | 3      | ...     |          |
| Spinal column ...          | 1      | ...     |          |
| Lower jaw ... ..           | 1      | ...     |          |
| Ankle ... ..               | 1      | ...     |          |
| <i>Fracture of</i> :       |        |         |          |
| Femur ... ..               | 3      | ...     |          |
| Tibia ... ..               | 7      | ...     |          |
| Clavicle ... ..            | 2      | ...     |          |
| Humerus ... ..             | 2      | ...     |          |
| Radius (Colle's) ...       | 3      | ...     |          |
| Skull ... ..               | 1      | 1       |          |
| Radius and Ulna ...        | 1      | ..      |          |
| Ribs ... ..                | 3      | ...     |          |
| Patella ... ..             | 1      | ...     |          |
| Lower jaw ... ..           | 3      | ...     |          |
| Hip ... ..                 | 1      | ...     |          |
| Spinal column ...          | 3      | ...     |          |
| Gunshot wound ... ..       | 4      | ...     |          |
| Foreign body in urethra... | 1      | ...     |          |
| Total ... ..               | 295    | 6       |          |



21. *Obstetrical returns.*

There were 45 confinements and 5 abortions as against 54 confinements and 2 abortions last year. They have been classified as follows :—

|                                                                       |     |     |                |
|-----------------------------------------------------------------------|-----|-----|----------------|
| 1. Premature delivery                                                 | ... | ... | 4              |
| 2. Uncomplicated labour L.O.A. presentation...                        |     |     | 36             |
| 3. Complicated labour :—                                              |     |     |                |
| <i>a.</i> Placenta Prævia                                             | ... | ... | 1              |
| <i>b.</i> Rupture of uterus                                           | ... | ... | 1              |
| <i>c.</i> Eclampsia                                                   | ... | ... | 2              |
| <i>d.</i> Precipitate labour, rupture of cervix and adherent placenta | ... | ... | 1              |
|                                                                       |     |     | <hr/> 45 <hr/> |

The return of births is as follows :—

TABLE XVII.

|                  | Number. | Deaths. |
|------------------|---------|---------|
| Full term        | 40      | ...     |
| Prematurely-born | 5       | 5       |
| Still-born       | 2       | 2       |
| Total            | 47      | 7       |

Premature delivery occurred in 4 cases. One mother suffered from Tuberculosis, two from Malarial Fever, Anæmia and Debility, the fourth was in good health. All the children died within a period varying from 2 hours to 5 days after birth. None of the mothers died in hospital. At full term 40 children were born ; one full term pregnancy accounts for 2 births, 41 cases of labour thus accounting for 42 births. The four premature deliveries account for 5 births, one being a case of twins.

Thus 45 confinements account for 47 births. Of these 47 births 2 children were still-born. Of the 47 children 23 were males and 24 females.

*Mortality of Mothers :—*

Two mothers died, one of Eclampsia, her case is related further on, the second case was a patient who suffered from great Anæmia, Debility and pernicious Malarial Fever, a weak female child was born the day after admission and the mother died on the same day from cardiac failure.

1. *Placenta Prævia* : The patient was suffering from Bright's disease, a month after her admission to hospital she was taken with hæmorrhage which occurred from a placenta abnormally situated near the internal os, podalic version was performed and a still-born child delivered. She suffered from Puerperal Fever, six weeks after delivery she was taken home in a weak condition and probably died.

2. *Prolapse of the Uterus during labour, rupture and inversion of the organ, vaginal hysterectomy.*

M. F. aged 35, has had three normal labours previous to the present one, on the 15th. of September she is taken with labour pains at 6 p.m. She states that her previous health has been good, and that nothing abnormal has occurred with the

genital organs during the whole term of her pregnancy but she frequently felt pains in the abdomen

At 7 p.m. she feels that something is protruding from the vagina and she sends for a native midwife who examines her, thus causing much pain. At 11 p.m. the bag of waters break, this is followed by bearing down pains which force still further out the mass she has felt protruding. At 4 a.m. on the 16th. the patient is brought to hospital. The Resident Surgeon finds, protruding through the vulva and fouled with fœcal matter, an enormously elongated cervix along with the partly everted vaginal walls. After a preliminary disinfection of the protruded organs, the patient is examined. The cervix is fully patulous, it is torn bilaterally, the right tear extends from the external os, up to the body of the uterus, the left tear does not extend further upwards than the part of the cervix exposed outside the vagina. The fingers have an easy access to the fœtal head which is fixed in the pelvis.

The patient's condition is fairly satisfactory, restoratives such as normal saline fluid, caffeine, strychnine are administered subcutaneously. With great difficulty, the posterior half of the lacerated cervix is returned into the vagina and pushed up towards the pelvic cavity, the same manœuvre is applied to the anterior half of the cervix. Firm pressure with both hands is used to keep the parts inside the vagina, but this is of no avail because the parts are forced out with each uterine pain. At 6 p.m. the child's head descends and a full term living female child is born. As soon as the body of the child is delivered, the fundus of the uterus follows in a condition of inversion. The cord is tied and the placenta rapidly peeled off. The uterus is reinverted with difficulty; but the lower part of the body of the organ, along with the torn elongated cervix and both vaginal walls, remain prolapsed outside the vulva. There is now profuse hæmorrhage from the tear on the right which goes up to the body of the uterus, clamp forceps are applied to each lip of the tear and by means of these the uterus, along with the vaginal walls, are gradually reduced into the pelvis, the enormously elongated cervix remaining outside. The parts are then thoroughly disinfected and dressed. Normal saline fluid is again injected and hot bottles applied to counteract shock.

Previous to operation the condition of the parts is as follows :—

The cervix is fully seven inches in length, it is purple in colour, the right tear extends up to the vaginal fornix into the broad ligament, but the pelvic cavity is not opened up, the tear on the left side reaches half way up the length of the elongated cervix.

At 1.30 p.m. the uterus is removed by vaginal hysterectomy after cutting off the cervix. No particular difficulty is experienced except in bringing down the uterus by means of the vulsellum forceps after a preliminary median section of the organ. The uterine walls are soft, the vulsella are not of good pattern and they tear through the uterine tissues. It appears to be quite hopeless to antevert the uterus by traction on the forceps alone, so the hand is passed behind the pubes, over the top of the fundus of the uterus, and the organ thus anteverted. The broad ligaments are clamped, and the clamps left in situ.

The clamps are removed on the third day, the patient goes through a long illness with fever, large sloughs from the broad ligaments are removed gradually, but a good recovery eventually follows through the Resident Surgeon's constant care of the case.

The woman was uneducated and the account she gives of



her health during pregnancy can hardly be relied upon, she must have suffered from hypertrophy of the cervix and some form of manual or instrumental interference must have caused the tears in the cervix which were noticed on admission to hospital.

No other treatment appeared indicated to us after consultation, the cervix previously fouled by fœcal matter, deeply torn up to the broad ligament, with clamp forceps attached, could hardly be left protruding from the vulva with any chance of a good recovery.

### 3. *Eclampsia.*

Two cases.

1st. Case. The patient was admitted in a moribund condition suffering from Eclampsia, a still-born child was delivered with forceps, the patient never recovered consciousness and she died the same day.

2nd. Case was a primipara admitted with Eclampsia, she was delivered with forceps under chloroform. Both mother and child eventually did well.

### 4. *Precipitate labour.*

The patient was admitted with Erysipelas of face extending to the chest. Nearly a fortnight after admission labour set in, it was very precipitate, the child being born within a few minutes.

The cervix was ruptured up to the vaginal fornix. The placenta was adherent and had to be removed piece-meal by the hand. The woman had puerperal fever but a month later she was discharged with her child, both in good health.

### 5. *Abortions.*

Five cases came under treatment, all the women eventually did well, no cause could be detected for the abortion in three cases.

One woman suffered from Influenza and another from Dysentery and Fever.

### 6. *Puerperal Fever.*

Six cases with 3 deaths. Two of them were sent from the Immigration office after abortion in the early months of pregnancy—both died.

Two cases were sent from the Central Dispensary; one died and one was discharged in good health. The last two cases are mentioned in this report; one of the cases was that of placenta prævia discharged six weeks after confinement in hospital, she was very weak at the time of her discharge. The other case was that of rupture of the uterus and hysterectomy, she recovered.

## LABORATORY WORK.

The Laboratory under the able management of Mr. Maya has done a good deal of good work, not only for the hospital but for the public in general.

The following summary indicates the nature of the researches carried out during the year, but a great many more examinations of blood films, sputum, exudates, sediments, &c., were examined, the record is not very carefully kept because both the Resident Surgeon and myself frequently forgot to enter in the book provided for the purpose examinations which we made.

## A.—BACTERIOLOGICAL.—1906.

## CIVIL HOSPITAL.

|       | Specimens examined.                        | Nature of researches.                      | Civil Hospital. | Medical & Health Department. | Military Department. | Private Practitioners. | Total. |
|-------|--------------------------------------------|--------------------------------------------|-----------------|------------------------------|----------------------|------------------------|--------|
| 1     | Blood                                      | Plague bacillus                            | 5               | 3                            | ...                  | ...                    | 8      |
|       | Sputum                                     | "                                          | 13              | ...                          | ...                  | ...                    | 13     |
|       | Smear preparations from buboes             | "                                          | 4               | 1                            | ...                  | ...                    | 5      |
|       | " " " spleen P. M.                         | "                                          | 7               | ...                          | ...                  | ...                    | 7      |
| 2     | Blood from suspected case of typhoid fever | Widal's test                               | 6               | 1                            | ...                  | 27                     | 34     |
| 3     | Blood                                      | Malarial parasites :                       |                 |                              |                      |                        |        |
|       | "                                          | a. Benign tertian                          | 10              | ...                          | ...                  | ...                    | 10     |
|       | "                                          | b. Double do.                              | 2               | ...                          | ...                  | ...                    | 2      |
|       | "                                          | c. Quartan                                 | 4               | ...                          | ...                  | ...                    | 4      |
|       | "                                          | d. Double quartan                          | 1               | ...                          | ...                  | ...                    | 1      |
|       | "                                          | e. Malignant tertian                       | 21              | ...                          | ...                  | 1                      | 22     |
|       | "                                          | f. Mixed                                   | 31              | 2                            | ...                  | 1                      | 34     |
| 4     | Blood (bullocks)                           | Surra trypanosoma                          | ...             | ...                          | ...                  | 4                      | 4      |
|       | " (horses)                                 | "                                          | ...             | 2                            | ...                  | 1                      | 3      |
|       | " (dogs)                                   | "                                          | ...             | 2                            | ...                  | 1                      | 3      |
| 5     | " (mules)                                  | Piroplasma equi                            | ...             | 4                            | ...                  | ...                    | 4      |
| 6     | Exsudate from tropical phagedœnic ulcers   | Pathogenic bacillus (Crendiropoulo)        | 3               | ...                          | ...                  | ...                    | 3      |
| 7     | False membranes and swabbings from throat  | Diphtheria bacillus                        | 4               | ...                          | ...                  | 9                      | 13     |
| 8     | Pus                                        | Pyo : organisms                            | 4               | ...                          | ...                  | ...                    | 4      |
| 9     | Sputum                                     | Tubercle bacillus                          | 124             | 4                            | ...                  | 22                     | 150    |
| 10    | "                                          | Pneumococci                                | 2               | ...                          | ...                  | ...                    | 2      |
|       | Pleuritic fluid                            | "                                          | 1               | ...                          | ...                  | ...                    | 1      |
| 11    | Stools                                     | Ankylostoma and other intestinal parasites | 39              | ...                          | ...                  | ...                    | 39     |
| 12    | Urethral discharge                         | Gonococcus                                 | 3               | ...                          | ...                  | 20                     | 23     |
| 13    | Urinary sediment                           | Ova of bilharzia                           | 10              | ...                          | ...                  | 8                      | 18     |
| 14    | "                                          | Filaria embryos                            | 2               | ...                          | ...                  | ...                    | 2      |
| 15    | Films prep: from chancre                   | 'Treponema pallidum'                       | 11              | ...                          | ...                  | ...                    | 11     |
|       | " " papules                                | "                                          | 6               | ...                          | ...                  | ...                    | 6      |
| 16    | Cystic fluid                               | Pathogenic micro-organism                  | 1               | ...                          | ...                  | ...                    | 1      |
| 17    | Blood                                      | Filariasis                                 | 11              | ...                          | ...                  | ...                    | 11     |
| Total |                                            |                                            |                 |                              |                      |                        | 438    |

## EXPERIMENTAL.

|                 |                                                        |     |   |     |     |   |
|-----------------|--------------------------------------------------------|-----|---|-----|-----|---|
| Blood of bovidæ | Inoculation on rabbits to test presence of trypanosoma | ... | 4 | ... | ... | 4 |
| " " of equidæ   | " on dogs                                              | ... | 2 | ... | ... | 2 |
|                 | " on rabbits                                           | ... | 4 | ... | ... | 4 |

## B.—NON-BACTERIOLOGICAL.

|   |                                                               |    |     |     |     |     |
|---|---------------------------------------------------------------|----|-----|-----|-----|-----|
| 1 | Microscopical examination of sections of pathological tissues | 13 | 4   | 4   | 5   | 26  |
| 2 | Enumeration of blood corpuscles                               | 3  | ... | ... | ... | 3   |
| 3 | Enumeration of white corpuscles                               | 16 | 1   | ... | 3   | 20  |
| 4 | Quantitative analyses of urine and microscopical examination  | 82 | 14  | ... | 40  | 136 |
| 5 | Radiographs                                                   | 9  | ... | 9   | 1   | 19  |



## 22. *Surgical operations.*

There were 139 operations performed under chloroform anæsthesia, 92 under cocaine local anæsthesia and a great many more minor operations, a proper account of which is not very carefully kept, making an approximate total of 486, amongst the most important were :—

*Abdominal section* :— 2 cases for ovarian cyst, one patient died of acute peritonitis within 36 hours. The operation had been a fairly easy one, I attribute the fatal result to some unfortunate mistake in the aseptic method during the operation. Very strict precautions were taken in the other case which did well.

*Liver abscess* :— 9 cases with 3 deaths, one died of Septicæmia three weeks after operation, the liver probably was affected with multiple abscesses, the second died of Dysentery 10 days after operation and the third died 2 days after operation.

Post-mortem examination of the last case showed multiple abscesses and diffuse infiltration of the liver tissue with pus.

*Radical cure of Hernia* :—One case.

*Excision of the Rectum for cancer* :—This case did very well, the disease was fairly low down and the whole of it could be excised without removing any of the bony walls of the pelvis.

*External Urethrotomy*.— Three cases, in one case the stricture could not be found from the perineum, the bladder was opened above the pubes and the stricture eventually dealt with.

*Vaginal Hysterectomy*.—Two cases, both did well, one for cancer of the cervix and another for rupture of the uterus during labour.

Of the 192 operations performed under chloroform 15 died.  
13 died of Septicæmia.

i.e., 1 suffered from Iliac abscess.

1 suffered from abscess of thigh.

1 Bright's disease and Gangrene of leg, in which amputation was performed.

1 Erysipelas of leg for which amputation was performed.

3 suppurative Arthritis of knee.

1 Erysipelas contracted in the Ward two months after operation on excision of the shoulder, the wound not having quite healed.

2 Abscess of liver.

1 Sub-pectoral abscess.

1 Chronic Dysentery. Liver was explored as a last resource.

1 Ovarian Cyst from use of badly prepared catgut.

As the majority of our patients belong to the lowest class, being Indian labourers, they sometimes refuse radical surgical interference when it is first suggested to them and consent to the operation when it is almost too late to interfere with any chance of success. This fact accounts for the deaths from Erysipelas and suppurative Arthritis of knee.

1 Patient died from shock after an extensive injury produced by a railway accident. The wound was cleaned under chloroform but no amputation was performed, the patient died a short time after.

1 case of Tracheotomy for cancer of Larynx died of suffocation 29 days after operation.

Local Anaesthesia was used for Cataract extraction and certain other operations on the eye, for circumcision, radical cure of Hydrocele, amputation of fingers and toes, removal of sebaceous cysts, empyema, opening abscesses including abscess of left lobe of liver, removal of needles from the hand, removal of ingrowing toe nail, &c.

RETURN OF SURGICAL OPERATIONS.

| Nature of Operations.                                                | Number. | Deaths. | Remarks.                                             |
|----------------------------------------------------------------------|---------|---------|------------------------------------------------------|
| 1. REMOVAL OF TUMOURS :                                              |         |         |                                                      |
| (a) <i>Non Malignant</i> :—                                          |         |         |                                                      |
| Sebaceous cyst ...                                                   | 6       |         |                                                      |
| (b) <i>Malignant</i> :—                                              |         |         |                                                      |
| Epithelioma of lip ...                                               | 1       |         |                                                      |
| Carcinoma of breast ..                                               | 1       |         |                                                      |
| Sarcoma of toe ...                                                   | 1       |         |                                                      |
| Do. of thigh ..                                                      | 1       |         |                                                      |
| Do. of spermatic cord<br>(including the appen-<br>dix vermiform) ... | 1       |         |                                                      |
| 2. <i>Amputations</i> :                                              |         |         |                                                      |
| Finger ...                                                           | 2       |         |                                                      |
| Thigh ...                                                            | 2       | 1*      | *Suffered from Erysipelas of leg.                    |
| Leg ..                                                               | 5       | 1†      | † Suffered from Bright's disease & gangrene of foot. |
| Foot ..                                                              | 1       |         |                                                      |
| Toe ..                                                               | 1       |         |                                                      |
| Tarsectomy ...                                                       | 1       |         |                                                      |
| 3. <i>Operations on bones for caries or Necrosis</i> :—              |         |         |                                                      |
| Caries of Tibia ...                                                  | 1       |         |                                                      |
| „ Humerus ...                                                        | 1       |         |                                                      |
| „ Nasal bone ...                                                     | 2       |         |                                                      |
| Excision of shoulder ...                                             | 1       | 1*      | * Died from Erysipelas two months after operation.   |
| Necrosis of jaw ...                                                  | 3       |         |                                                      |
| „ of Fibula ...                                                      | 1       |         |                                                      |
| „ of Femur ...                                                       | 1       |         |                                                      |
| Incision for lumbar abscess ...                                      | 1       |         |                                                      |
| Suppuration of frontal Sinus (radical cure) ...                      | 1       |         |                                                      |
| (b) Osteotomy of femur for old dislocation of hip ...                | 2       |         |                                                      |
| 4. <i>Operations on joints</i> :—                                    |         |         |                                                      |
| Arthrotomy for dislocation of hip ...                                | 1       |         |                                                      |
| Arthrotomy for supp : Arthritis of knee ...                          | 5       | 2†      | † One died of Pneumonia and one of Septicæmia.       |
| Aspiration of knee (synovitis) ...                                   | 1       |         |                                                      |
| Reduction of dislocation of:—                                        |         |         |                                                      |
| Hip ...                                                              | 1       |         |                                                      |
| Thumb ...                                                            | 1       |         |                                                      |
| Scraping for tubercular disease of wrist ...                         | 1       |         |                                                      |
| Rupture of adhesions ...                                             | 1       |         |                                                      |
| Carried over ...                                                     | 48      | 5       |                                                      |



| Nature of Operations.                          | Number. | Deaths. | Remarks.                                                   |
|------------------------------------------------|---------|---------|------------------------------------------------------------|
| Brought forward ...                            | 48      | 5       |                                                            |
| 5. <i>Operations on muscles and tendons</i> :— |         |         |                                                            |
| Incision for fistulous abscess of thigh ...    | 1       |         |                                                            |
| Sinuses of leg ...                             | 1       |         |                                                            |
| Tenotomy for Talipes ...                       | 2       |         |                                                            |
| Congenital hammer finger.                      | 1       |         |                                                            |
| Teno-synovitis ...                             | 1       |         |                                                            |
| Lacerated wound of thigh.                      | 1       | 1*      | *(Railway accident) Died of shock 1½ hour after admission. |
| 6. <i>Operations on the eye</i> :—             |         |         |                                                            |
| Cataract ..                                    | 33      |         |                                                            |
| Excision of the eye-ball...                    | 6†      |         | † For diseases contracted outside the hospital.            |
| Paracentesis of anterior chamber ...           | 1       |         |                                                            |
| Incision of cornea for ulcer.                  | 2       |         |                                                            |
| Pterygium ...                                  | 3       |         |                                                            |
| Entropion ...                                  | 2       |         |                                                            |
| Iridectomy for hernia of Iris ...              | 2       |         |                                                            |
| Needling for congenital cataract ...           | 2       |         |                                                            |
| Puncture of anterior chamber ...               | 1       |         |                                                            |
| 7. <i>Operations on the ear</i> :—             |         |         |                                                            |
| Keloid cicatrix of ear ...                     | 1       |         |                                                            |
| Mastoiditis ...                                | 5       |         |                                                            |
| 8. <i>Operations on head and face</i> :—       |         |         |                                                            |
| Hare lip ...                                   | 3       |         |                                                            |
| Reduction of dislocation of lower jaw ...      | 1       |         |                                                            |
| Foreign body in nose ...                       | 1       |         |                                                            |
| Extraction of tooth ..                         | 7       |         |                                                            |
| 9. <i>Operations on the chest</i> :—           |         |         |                                                            |
| Old empyema. Excision of 3 ribs ...            | 1       |         |                                                            |
| Tapping chest for fluid ...                    | 1       |         |                                                            |
| Empyema ...                                    | 2       |         |                                                            |
| 10. <i>Operations on abdominal wall</i> :—     |         |         |                                                            |
| Radical cure of hernia ...                     | 1       |         |                                                            |
| Liver abscess ...                              | 6       | 2§      | §1 died 10 days after 1 " 19 "                             |
| Ilio cæcal abscess ...                         | 2       |         |                                                            |
| Exploration for abscess of liver ...           | 4       | 1       |                                                            |
| Abdomen tapped ..                              | 20      |         |                                                            |
| Carried over ...                               | 162     | 9       |                                                            |

|| Exploration performed in a precarious condition. Died after exploration for abscess. No abscess found, suffered from chronic dysentery.

| Nature of Operations.                                     | Number. | Deaths. | Remarks.                                            |
|-----------------------------------------------------------|---------|---------|-----------------------------------------------------|
| Brought forward ...                                       | 162     | 9       |                                                     |
| 11. <i>Operations on rectum and anus</i> :—               |         |         |                                                     |
| Fistula in ano ...                                        | 8       |         |                                                     |
| Hæmorrhoids ligature ...                                  | 3       |         |                                                     |
| Excision of rectum for cancer ...                         | 1       |         |                                                     |
| Excision of external piles ...                            | 1       |         |                                                     |
| 12. <i>Operations on urinary organs</i> :—                |         |         |                                                     |
| Urinary fistula ...                                       | 2       |         |                                                     |
| Urethrotomy, external ...                                 | 2       |         |                                                     |
| „ with supra-pubic cystotomy ...                          | 1       |         |                                                     |
| Dilatation and catheterisation for urethral stricture.    | 5       |         |                                                     |
| Extraction of urethral calculus ...                       | 3       |         |                                                     |
| 13. <i>Operations on male generative organs</i> :—        |         |         |                                                     |
| Circumcisions ...                                         | 9       |         |                                                     |
| Hydrocele (Radical cure) ...                              | 9       |         |                                                     |
| Do. Tapped ...                                            | 10      |         |                                                     |
| Castration for Hæmatocele... ..                           | 1       |         |                                                     |
| Paraphymosis ...                                          | 1       |         |                                                     |
| Excision of papilloma of penis ...                        | 2       |         |                                                     |
| 14. <i>Operations on female generative organs</i> :—      |         |         |                                                     |
| Ovariectomy ...                                           | 2       | 1*      | *Died of Acute Septicæmia 36 hours after operation. |
| Curetting of Uterus ...                                   | 3       |         |                                                     |
| Vaginal hysterectomy for rupture of uterus ...            | 1       |         |                                                     |
| Hysterectomy (vaginal) ...                                | 1       |         |                                                     |
| Complete rupture of Perineum ...                          | 1       |         |                                                     |
| Excision of mamma ...                                     | 1       |         |                                                     |
| Colpotomy for abscess ...                                 | 1       |         |                                                     |
| 15. <i>Operations on lymphatic glands</i> :—              |         |         |                                                     |
| Excision of inguinal glands ...                           | 3       |         |                                                     |
| Scraping of inguinal glands.                              | 1       |         |                                                     |
| 16. <i>Operations on skin and subcutaneous tissues</i> :— |         |         |                                                     |
| Excision of carbuncle ...                                 | 5       |         |                                                     |
| Scraping of Phagedænic ulcers and cauterisation...        | 2       |         |                                                     |
| Skin grafting by Thiersch's method ..                     | 2       |         |                                                     |
| Carried over ...                                          | 243     | 10      |                                                     |



| Nature of Operations.                   | Number. | Deaths. | Remarks. |
|-----------------------------------------|---------|---------|----------|
| Brought forward ...                     | 243     | 10      |          |
| 16. <i>Operations on skin :—</i> Contd. |         |         |          |
| Excision of toe-nail ...                | 1       |         |          |
| Division of cicatricial tissues.        | 1       |         |          |
| Furunculus ...                          | 1       |         |          |
| Gangrene (Excision of tissue)           | 13      |         |          |
| Paronychia ...                          | 1       |         |          |
| 17. <i>Evacuation of abscesses :—</i>   |         |         |          |
| Head and face ...                       | 16      |         |          |
| Sub-temporal ...                        | 2       |         |          |
| Cervical ...                            | 12      |         |          |
| Pectoral ...                            | 1       |         |          |
| Abdominal wall ...                      | 5       |         |          |
| Dorsal ...                              | 3       |         |          |
| Lumbar ...                              | 1       |         |          |
| Upper extremity ...                     | 34      |         |          |
| Lower extremity ...                     | 58      | 1       |          |
| Iliac ...                               | 10      | 1       |          |
| Perineal and Ischic-rectal ...          | 13      |         |          |
| Gluteal ...                             | 2       | 1       |          |
| Tonsillar ...                           | 1       |         |          |
| Mammary ...                             | 11      |         |          |
| Inguinal ...                            | 2       |         |          |
| Scrotal ...                             | 7       |         |          |
| Sacral ...                              | 1       |         |          |
| Periosteal ...                          | 2       |         |          |
| Sub-Pectoral ...                        | 1       | 1       |          |
| Axillary ...                            | 1       |         |          |
| Perinephretic ...                       | 1       |         |          |
| Intra muscular ...                      | 2       |         |          |
| Glandular ...                           | 27      |         |          |
| Other regions ...                       | 2       |         |          |
| Suppurative cellulitis ...              | 7       |         |          |
| Peri-Urethral ...                       | 2       |         |          |
| Bronchial fistula of neck ...           | 1       |         |          |
| 18. <i>Tracheotomy</i> ...              | 1       | 1       |          |
| Total ...                               | 486     | 15      |          |

## DEPARTMENTAL.

Dr. Rouget left the Colony in March of last year for a well earned holiday.

I took over charge of the hospital on the 3rd. of March.

The Lay Nurse whose appointment was entertained last year, was appointed in May.

Two lady students have also been appointed on our staff ; they inaugurate the new plan adopted by Government to increase the facilities of intelligent and deserving young ladies for acquiring knowledge of hospital work, so as to qualify as Nurses.

These ladies help in the wards and attend to the female patients.

This system will in time provide a supply of fully trained

female attendants, who will easily find employment in the Government hospitals of the Colony and among the public.

The hospital building will have to be considerably modified to suit the purpose of a modern hospital, it does not, at present, offer facilities for separating septic from aseptic cases, for grouping medical, surgical and contagious diseases in separate wards. A small room or pantry should be built for each ward so as to provide a place for storing food.

Patients are fed at certain intervals during the day, but no food is served to those who are very ill from 5 p.m. to 8 a.m. next day unless milk is specially ordered for that purpose; even then there are no facilities for storing this milk, it frequently goes bad during the hot weather and patients have to fast for long hours.

There are many other drawbacks attached to the hospital, as it is now fitted, two alterations are urgently required.

1o. Separate operating theatre for aseptic cases.

2o. A defect which causes a good deal of hardship and sadness culminating to distress is the bad accommodation provided for women. There is no provision made for isolating women in labour from other pregnant women who happen to be inmates of the Lying-in Ward, it commonly occurs that a woman who has recently been confined or who expects to be confined at an early date witnesses the tragic circumstances of various methods of obstetrical interference.

*Radiography.* The new apparatus arrived late in the year and has been a most useful addition. I need scarcely mention its use in connection with fractures, dislocations, foreign bodies, &c. Mr. Maya has much credit for putting the somewhat complicated machinery together and for keeping the batteries charged.

In conclusion, I desire to thank all the members of the staff, including the model and accomplished Resident Surgeon, who have so ably assisted me during the year I acted as Superintendent. I shall always remember kindly the time I have spent at the Civil Hospital, although I am confident that the administrative part of my duties has not been as effective as that of my predecessor who had more time at his disposal to check the working of such a large institution.

I was surprised that so few books, illustrated papers, periodicals, flowers were so rarely presented to our patients, I take the opportunity, however, of thanking the very few who have kindly sent such very desirable articles to the sick under my charge.

E. L. DE CHAZAL,  
M.D., London.,

Acting Medical Superintendent.

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## ANNEXURE IX.

**Lunatic Asylum,***I.—General Statistics.*

The number of inmates in the Lunatic Asylum on 31st. December 1905 may be classified as follows :—

|             | Europeans. | Creoles. | Indians. | Chinese. | Total. |
|-------------|------------|----------|----------|----------|--------|
| Males ...   | 2          | 116      | 119      | 7        | 244    |
| Females ... | ...        | 105      | 62       | ...      | 167    |
| Total ...   | 2          | 221      | 181      | 7        | 411*   |

\* Exclusive of 1 Chinaman escaped and not yet recaptured.

2. *Inmates of the Asylum on 31st. December 1906.*

|             | Europeans. | Creoles. | Indians. | Chinese. | Total. |
|-------------|------------|----------|----------|----------|--------|
| Males ...   | 3          | 117      | 124      | 7        | 251    |
| Females ... | ...        | 114      | 59       | ...      | 173    |
| Total ...   | 3          | 231      | 183      | 7        | 424†   |

† Including one female patient under observation subsequently found to be sane.

3. The daily average number of patients at the Lunatic Asylum during 1906 was as follows :—

|         |     |        |
|---------|-----|--------|
| Males   | ... | 248.10 |
| Females | ... | 171.22 |

Total... 419.32

Showing an increase of 3.6 in the males and of 12.16 in the females over the corresponding daily averages in 1905.

The greatest number confined at one time in 1906 was 432 (256 males and 176 females).

There were 25 (23 male and 2 female) criminal lunatics treated in the Asylum in 1906, forming a percentage of 5.96 of the daily average. Out of these there were 7 males admitted in 1906, 1 male died and 1 male discharged on probation by order of His Excellency the Governor, 3 males time of imprisonment expired and transferred to the class of ordinary lunatics ; leaving a remainder of 18 males and 2 females on 31st. December 1906.

4. The daily average of harmless imbeciles at the Barkly Asylum Lunatic Branch Wards was as follows :—

|         |     |      |
|---------|-----|------|
| Males   | ... | 62.8 |
| Females | ... | 24.9 |

Total... 87.7

Exclusive of a daily average of 7.3 imbeciles (6.7 males and .6 females) under treatment in the wards of the hospital.

5. *Return of mental diseases, admissions and deaths in 1906 at the Lunatic Asylum.*

|                                                                                                         | Remain-<br>ing at<br>end of<br>1905. | Yearly Total.    |         | Total<br>cases<br>treat-<br>ed. | Remain-<br>ing at<br>end of<br>1906. |
|---------------------------------------------------------------------------------------------------------|--------------------------------------|------------------|---------|---------------------------------|--------------------------------------|
|                                                                                                         |                                      | Admis-<br>sions. | Deaths. |                                 |                                      |
| Idiocy ... ..                                                                                           | 10                                   | 9                | 2       | 19                              | 13                                   |
| Mania ... ..                                                                                            | 209                                  | 83               | 20      | 292                             | 215*                                 |
| Melancholia ...                                                                                         | 32                                   | 15               | 3       | 47                              | 35                                   |
| Dementia ... ..                                                                                         | 117                                  | 7                | 5       | 124                             | 116                                  |
| Delusional insanity..                                                                                   | 43                                   | 2                | ...     | 45                              | 44                                   |
| Total ...                                                                                               | 411                                  | 116              | 30      | 527                             | 423                                  |
| Admitted on interim<br>order in 1906 but<br>subsequently found<br>sane by Commis-<br>sioners in Lunacy. | ...                                  | 9                | ...     | 9                               | 1                                    |
| Total ...                                                                                               | 411                                  | 125              | 30      | 536                             | 424                                  |

\* Exclusive of the Chinaman (Ah-Wen) absconded and not yet recaptured.

6. *Admissions in 1906.*

|           | Europeans. | Creoles. | Indians. | Chinese. | Total. |
|-----------|------------|----------|----------|----------|--------|
| Males ... | 1          | 34       | 42       | 4        | 81     |
| Females.  | ...        | 28       | 16       | ...      | 44     |
| Total ... | 1          | 62       | 58       | 4        | 125    |

Showing an increase of 9 (6 males and 3 females) on the admissions of 1905.

91 (60 males and 31 females) were first admissions.

10 (4 males and 6 females) were second admissions.

2 (1 male and 1 female) were re-admissions from the Barkly Asylum Lunatic Branch Wards, to which they had been transferred as harmless imbeciles.

22 (15 males and 7 females) were re-admitted from probation.

7. The Districts from which these patients were admitted were as follows :—

|                        |     |
|------------------------|-----|
| Port Louis ...         | 33  |
| Plaines Wilhems ...    | 47  |
| Flacq ...              | 6   |
| Grand Port ...         | 9   |
| Savanne ...            | 7   |
| Moka ...               | 5   |
| Black River ...        | 4   |
| Rivière du Rempart ... | 6   |
| Pamplemousses ...      | 8   |
| Total ...              | 125 |



8. The mental diseases of 45 of the admissions were attributed to the following causes :—

|                |     |    |
|----------------|-----|----|
| Epilepsy       | ... | 5  |
| Gunjah smoking | ... | 8  |
| Opium smoking  | ... | 2  |
| Drink          | ... | 3  |
| Grief          | ... | 2  |
| Fever          | ... | 7  |
| Hysteria       | ... | 8  |
| Heredity       | ... | 4  |
| Congenital     | ... | 3  |
| Old age        | ... | 3  |
| Total          | ... | 45 |

No definite cause could be assigned in the remaining 80 cases. As I stated in my report last year, privations and frequent attacks of malarial fever may have been the principal causal factors in some of the cases, but being given the meagre information often supplied by the relatives and friends when applying to the District Magistrate for the transfer of a lunatic patient to the Asylum, I submit that it is highly desirable that the questions contained in Schedule A under Article 14 of Ordinance No. 23 of 1906 be properly answered by the applicants before an interim order is delivered by the District Magistrate, and that in the event of this not being done, an inquiry be ordered through the Police. This information is of the greatest importance for the proper diagnosis of the form of mental disorder of the patient as well as for guidance in his treatment.

9. There were 82 discharges, or 1 less than in 1905.

|             | Europeans. | Creoles. | Indians. | Chinese. | Total. |
|-------------|------------|----------|----------|----------|--------|
| Males ...   | ...        | 32       | 22       | 1        | 55     |
| Females ... | ...        | 12       | 15       | ...      | 27     |
| Total ...   | ...        | 44       | 37       | 1        | 82     |

10. They may be classified as follows:—

|             | Cured.              | Relieved.                                                    | Not improved.                                          | Total. |
|-------------|---------------------|--------------------------------------------------------------|--------------------------------------------------------|--------|
|             | Finally discharged. | Discharged on probation to the care of relatives or friends. | Transferred to the Barkly Asylum Lunatic Branch Wards. |        |
| Males ...   | 16                  | 34                                                           | 5                                                      | 55     |
| Females ... | 2                   | 20                                                           | 5                                                      | 27     |
| Total ...   | 18*                 | 54                                                           | 10                                                     | 82     |

\* Including 6 males and 2 females found to be sane by the Commissioners in Lunacy at the time of their examination.

11. One patient was finally discharged as cured from those already transferred to the Barkly Asylum, and 17 (11 males and 6 females) from those discharged on probation.

12. Total number of Lunatic patients in the Colony on 31st. December 1906.

|             | At<br>the Lunatic<br>Asylum. | At the Barkly<br>Asylum Lunatic<br>Branch Wards. | Out on<br>probation. | Total. |
|-------------|------------------------------|--------------------------------------------------|----------------------|--------|
| Males ...   | 251                          | 71                                               | 48                   | 370    |
| Females ... | 173                          | 30                                               | 18                   | 221    |
| Total ...   | 424                          | 101*                                             | 66                   | 591    |

\* Including 9 male and 1 female imbecile patients under treatment in the hospital wards.

If to this total be added 1 Chinaman escaped but not yet recaptured, there were 592 recognised lunatics or imbeciles in the Island, giving a proportion of total insane to population of 1.57 per 1000 or 1 in 632, as compared with 1 in 669 in 1905.

The population of the Colony on 1st. January 1907, from information kindly supplied by the Registrar General, consisting of 143,390 males and 119,182 females, the ratio of male and female insane respectively to total male and female population was as follows :—

Male ... 2.58 o/100 of male population  
Female... 1.85 o/100 of female population

showing a relatively greater proportion of male insane.

13. The percentage of recoveries (cured and relieved) to admissions was 57.6 as compared with 63.79 in 1905 and 52.9 in 1904.

The percentage of the same to daily average was 17.1.

14. There were 30 deaths in the Institution in 1906 or 6 less than in 1905.

The death-rate to daily average was 7.1 o/100 or a decrease of 1.8 o/100 on that of the previous year.

15. The patients who died belonged to the following classes of the population :—

|             | Europeans. | Créoles. | Indians. | Chinese. | Total. |
|-------------|------------|----------|----------|----------|--------|
| Males ...   | ...        | 1        | 15       | 3        | 19     |
| Females ... | ...        | 7        | 4        | ...      | 11     |
| Total ...   | ...        | 8        | 19       | 3        | 30     |



## 16. Ages of patients who died :—

| Age.  |     | Number of patients. |
|-------|-----|---------------------|
| 10—20 | ... | 3                   |
| 20—30 | ... | 4                   |
| 30—40 | ... | 4                   |
| 40—50 | ... | 4                   |
| 50—60 | ... | 4                   |
| 60—70 | ... | 7                   |
| 70—80 | ... | 3                   |
| 80—90 | ... | 1                   |
| Total | ... | 30                  |

## 17. Causes of death :—

|                     |     |    |
|---------------------|-----|----|
| Senile decay        | ... | 8  |
| General Debility    | ... | 4  |
| Epilepsy            | ... | 3  |
| Cerebral congestion | ... | 2  |
| Tuberculosis        | ... | 3  |
| Influenza           | ... | 3  |
| Pleuro-pneumonia    | ... | 1  |
| Remittent fever     | ... | 1  |
| Malarial Cachexia   | ... | 1  |
| Dysentery           | ... | 1  |
| Diarrhoea           | ... | 2  |
| Anæmia              | ... | 1  |
| Total               | ... | 30 |

18. The greater number of deaths, as seen from the last table, was due to senile decay and to general debility.

9 of the patients who died had been admitted into the Asylum in a delicate state of health and 6 of them died within a year of their admission. One of them was 81 years old.

On the other hand the average stay of those who died was 7 years. One patient had been admitted since 1870.

6 (3 male and 3 female) patients were reported to have died from the imbeciles at the Barkly Asylum Lunatic Branch Wards.

1 male patient died from among the probationers.

II.—*Prevalence of Sickness in the different seasons of the year and general character of disease prevailing.*

19. The total number of admissions into the two Infirmaries of the Lunatic Asylum was 441 (277 males and 164 females) or 32 less than in 1905.

20. The daily average of sick in the Infirmaries for the last 5 years was as follows :—

|                    | 1902  | 1903  | 1904  | 1905  | 1906  |
|--------------------|-------|-------|-------|-------|-------|
| Male Infirmary ... | 13.29 | 13.82 | 10.81 | 16.10 | 16.11 |
| Female Infirmary.. | 14.75 | 8.99  | 14.76 | 11.72 | 13.21 |
| Total ...          | 28.04 | 22.81 | 25.57 | 27.82 | 29.32 |

The daily average of sick has again been relatively high and has shown an increase in the female Infirmary.

21. Percentage of daily average of sick to daily average strength :—

| 1902. | 1903. | 1904. | 1905. | 1906. |
|-------|-------|-------|-------|-------|
| 7.1   | 5.8   | 6.2   | 6.8   | 6.9   |

showing a gradual increase in the sick rate since 1903.

The case-mortality for total cases treated was 6.8 o/o, or 3 o/o lower than in 1905.

22. Table of monthly admissions into the two Infirmaries, total stay, average stay per patient and deaths.

| Months.                   | Male Infirmary. | Female Infirmary. | Total.     | Deaths. |
|---------------------------|-----------------|-------------------|------------|---------|
| January ...               | 27              | 15                | 42         | 2       |
| February ..               | 24              | 10                | 34         | 2       |
| March ...                 | 26              | 20                | 46         | 6       |
| April ..                  | 26              | 9                 | 35         | 1       |
| May ...                   | 23              | 15                | 38         | 3       |
| June ...                  | 20              | 9                 | 29         | 1       |
| July ...                  | 29              | 21                | 50         | 3       |
| August ..                 | 26              | 14                | 40         | 1       |
| September ..              | 12              | 12                | 24         | 4       |
| October ...               | 17              | 9                 | 26         | 3       |
| November ...              | 23              | 16                | 39         | 4       |
| December ..               | 24              | 14                | 38         | ...     |
| Total ....                | 277             | 164               | 441        | 30      |
| Total stay ...            | 4,421           | 5,603             | 10,024     | ...     |
| Average stay per patient. | 15.9 days.      | 34.1 days.        | 22.2 days. | ...     |

23. Admissions into the Infirmaries in each quarter of 1906.

|                  |     |     |     |
|------------------|-----|-----|-----|
| 1st. Quarter ... | ... | ... | 122 |
| 2nd. „           | ... | ... | 102 |
| 3rd. „           | ... | ... | 114 |
| 4th. „           | ... | ... | 103 |
| Total            | ... | ... | 441 |

24. Monthly admissions for malarial fever, dysentery, diarrhoea, tuberculosis and lung affections in both Infirmaries.

| Diseases.          | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Malarial fever ... | 19       | 8         | 15     | 13     | 19   | 7     | 7     | 3       | 4          | 5        | 7         | 9         | 116    |
| Dysentery ...      | 1        | ...       | 1      | 1      | 1    | 1     | 2     | 1       | ...        | ...      | ...       | ...       | 8      |
| Diarrhoea ...      | 1        | 5         | 2      | 3      | ...  | 1     | 2     | 1       | ...        | 6        | 6         | 5         | 32     |
| Tuberculosis ...   | ...      | ...       | 1      | ...    | ...  | 1     | ...   | 1       | ...        | ...      | ...       | ...       | 3      |
| Lung affections :— |          |           |        |        |      |       |       |         |            |          |           |           |        |
| viz : { Asthma ... | 1        | ...       | 1      | 1      | ...  | 1     | ...   | ...     | 1          | ...      | 1         | 2         | 8      |
| Influenza ...      | 2        | 1         | 1      | 3      | ...  | 2     | 19    | 5       | 2          | 1        | ...       | 3         | 39     |



25. From these tables we find that as usual the greatest number of admissions took place in the first quarter of the year and the next in the third quarter.

If we take the summer (November to April) and winter (May to October) admissions we find, as is observed year after year, that the greatest number (234) occurred in the former season as compared with the latter (207).

26. Malarial fever was responsible for the greatest number of admissions in the first two quarters, while influenza was the prevalent complaint in the cooler months.

There was a reduction of 46 in the admissions from malarial fever as compared with 1905.

The type was mild, viz: the quotidian, and generally yielded to quinine administrations. One case of remittent fever died.

27. The usual correlation between dysentery and malarial fever was again observed in 1906.

There having been a reduction in the admissions for the last named disease there was likewise a reduction in those of dysentery from 15 in 1905 to 8 in 1906. The mortality also fell from 4 to 1. The cases occurred chiefly during the end of the summer and early winter months.

28. Diarrhœa was, as observed in 1905, prevalent throughout the year; but the greatest number (17) occurred in the last quarter. There were 12 cases less than in 1905. It affected chiefly the old and debilitated patients. 2 deaths were due to this cause.

29. There was an increase of 12 in the admissions for influenza as compared with 1905.

This complaint was prevalent throughout the year but increased during the months of July and August. 4 deaths were due to this cause. In one case the disease was complicated with pleuro-pneumonia.

30. We had 10 admissions for ulcers of leg, but none of the phagedænic type which occurred in 1904.

31. The principal admissions for other diseases were as follows:

|                               |     |    |
|-------------------------------|-----|----|
| Epilepsy                      | ... | 24 |
| Cellulitis and abscesses      | ... | 23 |
| Paronychia                    | ... | 10 |
| Debility (chiefly senile)     | ... | 34 |
| Lymphangitis                  | ... | 6  |
| Anæmia                        | ... | 5  |
| Rheumatism                    | ... | 4  |
| Eczema                        | ... | 10 |
| Ecthyma                       | ... | 1  |
| Wounds from falls or blows    |     |    |
| from other patients in cells. |     | 46 |

These injuries included 2 cases of fracture, 1 of a rib and the other of the left clavicle, resulting from falls while excited patients suddenly attacked each other in the cells before they could be separated by the attendants. Both cases did well. In spite of the restlessness of one of the patients and great trouble from his frequently pulling down the bandages applied to maintain his left arm at rest, firm union without deformity took place in the case of the fracture of the clavicle.

One patient was admitted for poisoning with lilac leaves. While at work in the outer enclosure of the cells he had swal-

lowed some leaves from a lilac tree close by. It brought on collapse followed by symptoms resembling an epileptiform attack. On administering a stimulant and an emetic the patient vomited the leaves and soon recovered.

It was not generally known that lilac leaves could have had such an effect.

(This patient was not an epileptic and had never had a fit before).

### III.—*Meteorological conditions of the seasons and their probable effect with regard to sickness.*

32. The average temperature of the summer taken in the Asylum was 78 ° F. as compared with 80 ° F. in 1905, and that of the winter months 70 ° F. or about the same as in the previous winter.

There was therefore a cooler summer, which may have caused the reduction observed in the cases of malarial fever. There were cold winds prevalent during the winter months which may have caused the increase of Influenza in July and August. No exact meteorological observations were however made thereon.

As referred to in my last Annual Report the Asylum has been provided with a good barometer, a wet and dry bulb thermometer and a rain gauge, and local meteorological observations have already been commenced which may prove of service in estimating the influence of atmospheric agencies on the prevalence of disease in the local Government Institutions.

### IV.—*Other observations concerning the Institution.*

33. The sanitary works referred to in my last two Annual Reports for the extension of the underground drainage of the Asylum with a view to conducting the refuse water of the bath rooms and washings from the latrines to be utilised for watering purposes in the back gardens of the Institution were continued in 1906 in the female compound, but unfortunately had to be left unfinished. It is desirable that the work be completed as soon as possible as well as all the important measures for the improvement of the Asylum which have been recommended, but which are still in abeyance.

It is satisfactory to know that a great improvement has been effected in the Infirmaries by the construction of two separate latrines at a short distance from the Infirmaries and communicating therewith by means of an open grated passage.

34. There were only 3 escapes from the Asylum in 1906 as compared with 7 in 1905. Two from the outer gardens where they were at work and one over the walls. They were all recaptured and brought back to the Asylum.

35. One birth took place in the Asylum on Christmas day. One of the female patients admitted on interim order a few days before was delivered of a female child. This patient was however not found to be insane by the Commissioners in Lunacy and discharged subsequently.

36. Two entertainments with the cinematograph and gramophone were given in 1906 and gave much pleasure to the patients.



37. The daily average of lunatics employed in 1906 was as follows :—

|            | Gardening. | Trade. | Household work.                                         |
|------------|------------|--------|---------------------------------------------------------|
| Male ...   | 21.47      | 16.71  | 42.88                                                   |
| Female ... | ...        | ...    | Washing ... 15.08<br>Wards ... 22.89<br>Sewing ... 9.20 |

The savings realised by Government in 1906 by the work of the lunatics and their attendants in the Asylum amounted to Rs. 5,819.89 or Rs. 561.25 more than in 1905 (Vide Annexure A.).

38. The average cost of the diets based on the average prices in 1905 supplied by the Storekeeper General's Department, was as follows :—

(1). First class sick.

(For Europeans and better class of patients) ... .. Rs. 0.43,7686 Cents.

(2). First class normal.

(For Europeans and better class of patients) ... .. Rs. 0.62,0608 Cents.

(3). Second class sick.

(For natives) ... .. Rs. 0.46,1102 Cents.

(4). Second class normal.

(For natives) ... .. Rs. 0.2818 Cents.

There was a reduction of 3 and 1 Cent. respectively in the two first diets as compared with 1905, but an increase of 2 and 1 Cent respectively in the two last.

I append a copy of these diets, giving the prices of each article as worked out by the Steward and Accountant (Vide Annexures B and C).

J. I. PADDLE,

Medical Superintendent,  
Lunatic Asylum.

1st. April, 1907.

## ANNEXURE A.

STATEMENT OF WORKS, &c., DONE BY THE ATTENDANTS AND PATIENTS  
OF THE GOVERNMENT LUNATIC ASYLUM DURING THE YEAR 1906.

| Description of work.                    | Quantity.       | Contract Price<br>or<br>Estimated Cost. | Amount.     |     | Total. |     |
|-----------------------------------------|-----------------|-----------------------------------------|-------------|-----|--------|-----|
|                                         |                 |                                         | Rs.         | c.  | Rs.    | c.  |
| <i>Gardens.</i>                         |                 |                                         |             |     |        |     |
| Green brèdes                            | kilos 7,091.900 | Rs. 0.07 per kilo.                      | 496         | 43  |        |     |
| Potherbs                                | 2,159.750       | .14     "                               | 302         | 36  |        |     |
| Love apples                             | 35.400          | .28     "                               | 9           | 91  |        |     |
| Bananas                                 | No. 1,282       | .60 %                                   | 7           | 69  |        |     |
| Arrow-root                              | kilos 59.000    | .19 per kilo.                           | 11          | 21  |        |     |
|                                         |                 |                                         |             |     | 827    | 60  |
| <i>Masonry.</i>                         |                 |                                         |             |     |        |     |
| Dry Walls                               | 76 feet         | Estimated                               | 25          | 33  |        |     |
| Repairs to drains, &c., &c.             |                 | do.                                     | 70          | ... |        |     |
| Pavement of path in female pr. quarters | 44½ × 4 ft.     | do.                                     | 29          | 67  |        |     |
|                                         |                 |                                         |             |     | 125    | ... |
| <i>*Tinware.</i>                        |                 |                                         |             |     |        |     |
| New Ustensils                           |                 | Estimated                               | 299         | 65  |        |     |
| Repairs                                 |                 | do.                                     | 108         | ... |        |     |
|                                         |                 |                                         |             |     | 407    | 65  |
| <i>Carpentry.</i>                       |                 |                                         |             |     |        |     |
| Repairs to tables, forms, &c., &c.      |                 | Estimated                               | 25          | ... |        |     |
|                                         |                 |                                         |             |     | 25     | ... |
| <i>Bedding &amp; Clothing.</i>          |                 |                                         |             |     |        |     |
| Making of new mattresses                | 143             | Rs. 0.50 each.                          | 74          | ... |        |     |
| "     "     pillows                     | 108             | .25     "                               | 27          | ... |        |     |
| Repairs & remaking of old mattresses    | 1,099           | .50     "                               | 549         | 50  |        |     |
| "     "     "     pillows               | 843             | .25     "                               | 210         | 75  |        |     |
| Repairs to strong dresses               | 1,035           | .10     "                               | 103         | 50  |        |     |
| "     to clothing                       | 24,407 pieces   | .05     "                               | 1,220       | 35  |        |     |
|                                         |                 |                                         |             |     | 2,185  | 10  |
| <i>Sundries.</i>                        |                 |                                         |             |     |        |     |
| Straw hats                              | 190             | Rs. 0.30 each.                          | 57          | ... |        |     |
| "     repairs to                        | 54              | .05     "                               | 2           | 70  |        |     |
| *Washing                                | 181,550 pieces  | 1.50 %                                  | 2,189       | 84  |        |     |
|                                         |                 |                                         |             |     | 2,249  | 54  |
|                                         |                 |                                         | Total   Rs. |     | 5,819  | 89  |
| * After deducting cost of materials.    |                 |                                         |             |     |        |     |

\* After deducting cost of materials.



## ANNEXURE B.

## FIRST CLASS SICK 1906.

| Articles of Diet. | Amount of Diet. | Quantity per 100 Diets. | Price per kilo. | Value of 100 Diets. |       |
|-------------------|-----------------|-------------------------|-----------------|---------------------|-------|
|                   |                 |                         |                 | Rs.                 | c.    |
| Beef              | Kil. 0.225 grs. | Kil. 22.500             | Rs. 1.20        | 27                  | 00    |
| Bread             | .340            | .34                     | .17.30          | 5                   | 88.20 |
| Milk              | Litre 1.        | Litres 100.             | .09             | 9                   | 00    |
| Sugar             | Kil. 0.045      | Kil. 4.500              | .13.48          |                     | 60.66 |
| Tea               | .008            | .800                    | 1.60            | 1                   | 28.   |
| Total ...         |                 |                         |                 | 43                  | 76.86 |

## FIRST CLASS NORMAL.

|            |            |             |          |    |       |
|------------|------------|-------------|----------|----|-------|
| Beef       | Kil. 0.225 | Kil. 22.500 | Rs. 1.20 | 27 | 00    |
| Bread      | .450       | „ 45.       | 17.30    | 7  | 78.50 |
| Butter     | .030       | 3.          | 1.55     | 4  | 65.   |
| Fresh Fish | .225       | 22.500      | .53.33   | 11 | 99.92 |
| Milk       | Lit. 0.25  | Lit. 25.    | .09      | 2  | 25.   |
| Potherbs   | Kil. 0.110 | Kil. 11.000 | .14      | 1  | 54.   |
| Potatoes   | .225       | 22.500      | .22      | 4  | 95.   |
| Sugar      | .045       | 4.500       | .13.48   |    | 60.66 |
| Tea        | .008       | .800        | 1.60     | 1  | 28.   |
| Total ...  |            |             |          | 62 | 06.08 |

## ANNEXURE C.

## SECOND CLASS SICK 1906.

| Articles of Diet. | Amount of Diet.  | Quantity per 100 Diets. | Price per kilo. | Value of 100 Diets. |       |
|-------------------|------------------|-------------------------|-----------------|---------------------|-------|
|                   |                  |                         |                 | Rs.                 | c.    |
| Beef              | Kil. 0.225 grams | Kil. 22.500             | Rs. 1.20        | 27                  | 00    |
| Bread             | .340             | 34.                     | .17.30          | 5                   | 88.20 |
| Milk              | Litre 1.         | Litres 100.             | .09             | 9                   | 00    |
| Rice              | Kil. 0.225       | Kil. 22.500             | .14.57          | 3                   | 27.82 |
| Sugar             | .023             | 2.300                   | .13.48          |                     | 31.   |
| Tea               | .004             | .400                    | 1.60            |                     | 64.   |
| Total ...         |                  |                         |                 | 46                  | 11.02 |

## SECOND CLASS NORMAL.

| Articles<br>of Diet. | Amount<br>of Diet. | Quantity<br>per 100<br>Diets. | Price<br>per kilo. | Value of 100 Diets. |       |            |       | Remarks.                                |
|----------------------|--------------------|-------------------------------|--------------------|---------------------|-------|------------|-------|-----------------------------------------|
|                      |                    |                               |                    | Milk days.          |       | Fish Days. |       |                                         |
|                      |                    |                               |                    | Rs.                 | c.    | Rs.        | c.    |                                         |
| Bread                | Kil. 0.225         | Kil. 22.500                   | Rs. 0.17.30        | 3                   | 89.25 | 3          | 89.25 | Milk days 3 times<br>a week.            |
| Butter               | .010               | 1.                            | 1.55               | 1                   | 55.   | 1          | 55.   |                                         |
| Fresh Fish           | .225               | 22.500                        | .53.33             | ...                 | ...   | 11         | 99.92 |                                         |
| Milk                 | 75 & 13 Centil :   | 75&13 Litres                  | .09                | 6                   | 75.   | 1          | 17.   | Average cost per<br>patient Rs. 0.28.18 |
| Dholl                | Kil. 0.060         | Kil. 6.000                    | .12.80             | ...                 | ...   | ...        | 76.80 |                                         |
| Salt fish            | .060               | 6.                            | .29.60             | ...                 | ...   | 1          | 77.60 |                                         |
| Potherbs             | .110               | 11.                           | .14                | ...                 | ...   | 1          | 54.   |                                         |
| Rice                 | .450               | 45.                           | .14.57             | 6                   | 55.65 | 6          | 55.65 |                                         |
| Sugar                | .023               | 2.300                         | .13.48             | ...                 | 31.   | ...        | 31.   |                                         |
| Tea                  | .004               | .400                          | 1.60               | ...                 | 64.   | ...        | 64.   |                                         |
| Potatoes             | .225               | 22.500                        | .22                | 4                   | 95.   | ...        | ...   |                                         |
| Green Brèdes         | .120               | 12.                           | .07                | ...                 | 84.   | ...        | ...   |                                         |
| Total ...            |                    |                               |                    | 25                  | 48.90 | 30         | 20.22 |                                         |

## ANNEXURE X.

[EXTRACT FROM ANNUAL REPORT OF DR. MÉNAGÉ, GOVERNMENT  
MEDICAL OFFICER OF RIVIÈRE DU REMPART].

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*Malaria.*—The endemo epidemic of malaria assumed during the months of January, February and March its usual pandemic form in the district of Rivière du Rempart and but few are those who escaped the malady.

A larger number of mosquitoes than is usually met with has not however been observed during the first quarter of 1906 ; but the heat has been intense, vegetation luxuriant, and the population getting poorer and poorer daily has proved less resistant.

I may recall the fact that in my report for 1905 I maintained that the mosquito was not the only agent in the transmission of malaria and that vegetation was in a large measure responsible for the dissemination of the plasmodium malariae.

A further year's experience and observations in a notoriously malarious locality has added still more to my belief in the febrigenetic power of the soil.

Estate medical practitioners are in a measure to bear testimony to the fact that the first men on estates to suffer from malaria are the very same who are detailed to carry out the diggings.

The holes however are dug during the day when the workers are not bitten by mosquitoes and often during prolonged droughts when no pools exist. Yet these are the men the first to contract the disease.

Although I am a firm believer in the transmission of hæmatozoa by the anopheles, I am not prepared to accept implicitly the statement "no anopheles no malaria".

I am convinced that digging the ground, heat, fatigue, food, insufficient in quantity and inadequate in quality, by diminishing the powers of resistance of the organism, render more liable to infection by malaria germs which, I repeat, are not exclusively carried by mosquitoes but also in the dust and in the ingesta.

Transmission from man to man must be very rare, else every malaria patient would infect his neighbourhood, and Curepipe,



our sanatorium, should be at present as unhealthy as Rivière du Rempart.

That mechanical protection and quinine prophylaxis are excellent measures is undeniable; but they must not alone be relied upon for absolute protection against malaria.

It is indispensable that the upturning of the soil during the hot season be avoided, and where this work is performed, none but the strongest, rendered less susceptible to the disease by the daily absorption of quinine, should be employed. Care should be taken moreover that these men are not made to work during the hotter hours of the day.

In one word, I am of opinion that while guarding oneself against the anopheles one should not neglect to take the necessary precautions against the soil which contains the plasmodium in some form with which we are not as yet acquainted.

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*Typhoid Fever.*—Two cases of typhoid fever were treated. One of these ended fatally, that of a woman admitted on March 11th. in a delirious state. The patient had diarrhoea and a very rapid pulse. In spite of all the cardiac stimulants administered, the patient succumbed on the 22nd. of the same month.

The second case occurred on a child aged 7 who was admitted in the general ward on January 7th. as suffering from the remittent type of malaria. On the 12th. typhoid fever was diagnosed and the child removed to the contagious disease ward where he underwent the cold bath treatment. The patient left hospital on February 3rd. cured.

*Diphtheria.*—I attended two children at the hospital for diphtheria; both cases unfortunately had a fatal issue. The first case was admitted in a desperate condition. He was nevertheless immediately inoculated but died a few hours later.

The second child, aged 14 months, came from Port Louis and was admitted on January 16th. He had been ill for several days already and false membranes extended over the whole of his throat. 10 c.c. of antidiphtheric serum were immediately injected followed by a similar injection the next day. The false membranes disappeared and the extensive inflammation entirely subsided so that by the 22nd. the child was so well that I allowed the mother to walk with him under the contagious disease ward verandah. The next day, 23rd., the child suddenly died in a syncope in presence of the nurse.

Death in this case is due to failure of action on the part of the myocardium—an occurrence unfortunately too commonly met with when serum is injected late; the false membranes disappear, the patient seems to have recovered, but the whole system has been so impregnated with toxins that the heart undergoes a process of myocarditis which leads to sudden death.

In either of these two cases the contacts were preventively inoculated and none developed the disease.

*Influenza.*—This disease assumed an epidemic form during the month of July when 55 cases with 4 deaths were treated at the hospital.

*Pneumonia.*—Forty-two patients with the disease were treated at the hospital during the year; 17 died, giving a case-mortality of 40.04 o/o, a very high figure indeed but which is easily explainable when it is remembered that these patients arrive at the hospital in an exhausted state, dying mostly on the

day of their admission or that following. I have already had occasion to make the same remarks in my report for last year.

I have tried in three cases the hypodermic injection of Ol : Terebinth : with success in each instance. The experiment is encouraging and I intend giving the mode of treatment a further trial ; the only drawback is that the abscess which is produced at the site of inoculation must be opened. Its healing however rapidly takes place if the injections have been made with strict asepsis.

*Whooping Cough.*—There was an epidemic of this disease during the earlier months of the year. It was responsible for the admission into the hospital of 13 patients, one of whom died.

Satisfactory results were obtained with treatment by arsenic. The preparation employed—Fowler's solution—being administered at the rate of 1 minim per year of the patient's age.

*Tropical Ulcer.*—This disease prevailed during the first half of 1906. Beginning in February, it rose in March and April to completely disappear by the end of June. A total of 47 cases were admitted.

*Nephritis.*—Numerous cases of nephritis continue to be admitted, no explanation besides their being sequelæ to influenza and malaria can be forthcoming.

*Diabetes.*—I should like to call attention to the apparent increase in the incidence of that disease. The number of cases I have had to attend is 10, a figure never reached as yet.

*Ankylostomiasis.*—This disease continues to prevail and as its diagnosis is at present more easily arrived at, the number of admissions for the year has increased.

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#### ANNEXURE TO DR. MÉNAGÉ'S REPORT.

##### *A case of sudden death by cardiac embolism.*

B. Jhurmo, laborer, aged 48, admitted in Poudre d'Or Hospital Ward 1, bed 22, on September 10th. 1906 at 9 a.m.

The patient complains of passing blood in his stools which are frequent and of pain in the anus.

On examination an engorged chain of hæmorrhoids is met with, painful to the touch. The introduction of the finger in the anus is attended by severe pain. A number of soft polypus—like tumours are felt.

The spleen and liver are enlarged. No valvular murmurs are heard over the cardiac region.

The diagnosis of hæmorrhoids is made and small doses of sodium sulphate are prescribed concurrently with local inunctions of vaseline and cocaine.

The urine on examination reveals the presence of phosphaturia, gives an acid reaction and shows a density of 1020.

September 12th. : The patient's condition has improved, the hæmorrhoidal ring is less painful to the touch. Cold enemias are prescribed as well as fluid extract of hamamelis and the application of an ointment containing 1/1000th. part of adrenaline in the hope that a reduction in the size of the hæmorrhoids will follow and that they will cease bleeding.

September 14th. : Hæmorrhage occurs copious enough to justify the administration of calcium chloride. The stools continue to be frequent.

September 16th. : Bleeding is not so copious but as the stools



are still numerous and accompanied by tenesmus, Belin's treatment is prescribed.

September 17th.: Patient dies suddenly at 1.30 a.m. of syncope.

*Post-mortem*:—The post-mortem was made 10 hours after death. Tight pleural adhesions on both sides are present.

Both lungs are emphysematous at their apices and along their anterior borders.

Heart: A white patch is present on the anterior surface of the right ventricle and atheromatous patches at the opening of the Aorta.

A hard fibrinous clot of the size of a finger is found in the right ventricle, evidently coming from the veins as it is elongated in form and presents the imprint of the venous valves.

The Rectum presents old cicatrised ulcerations extending into the ascending colon as well as a number of large hæmorrhoids, some of which at the level of the sphincter externus, are ulcerating.

The case is interesting as a fibrinous clot which is beyond doubt a venous embolism and which cannot be associated with phlebitis in the absence of either swelling or pain is found in the right ventricle at the post-mortem of an evidently old dysenteric patient suffering from ulcerating hæmorrhoids.

#### ANNEXURE XI.

*Extract from the Annual Report of Dr. S. A. R. Monty,  
Government Medical Officer of Flacq.*

.....

Whilst Fever and Dysentery prevailed to a lesser extent last year than during the preceding one, Influenza and Phthisis on the contrary were more rife — especially Influenza which raged in an epidemic form during the month of July, when 120 patients were admitted suffering from it. The disease manifested itself in all its varied forms: the Bronchitic, Neuralgic, Cardiac, Pneumonic, Hæmoptysic, Gastro-intestinal, giving rise in some cases to severe Otitis, which led to partial deafness and in one case to complete loss of the sense of smell.

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#### ANNEXURE XII.

ANNEXURE TO DR. L. VINSON'S ANNUAL REPORT.

*Hypodermic injections of Camphorated Carbolic Acid in the treatment of Tetanus.*

In the number of the "Semaine Médicale" dated 5th. June 1895, Dr. Ocherovsky, a Russian military medical officer, published his observations on the treatment of a case of traumatic tetanus by means of hypodermic injection, every 3 hours, of 12 drops of a Carbolic Acid solution of 0.2 % strength.

In his communication, Dr. Ocherovsky stated he had resorted to that means after he had completely failed with the other preconised preparations; viz: opium, chloral, the bromides, &c., and when the patient was, practically speaking, on the point of dying. After 2 days of the treatment, the conditions improved and the patient was finally cured, having received in all twenty-eight doses.

Soon after my attention had been called to this mode of treatment, in the same year, I had a case of traumatic tetanus. I prescribed daily 50 drops of Carbolic Acid to be taken by the mouth, in milk or syrup, during the 24 hours. Large doses of chloral, bromide and opium were also administered. The patient recovered.

Encouraged by the success, I have from that time used the combination of the above drugs in the treatment of tetanus. If I have succeeded in curing many a case of "idiopathic" (i.e. one in which no wound is apparent) tetanus, I must in fairness, state that I have not met with the same measure of success with respect to the "traumatic" ones.

In December 1903, Dr. E. Vinson, my father, tried Dr. Ocherovsky's method at the hospital of Moka in a case of idiopathic tetanus. The doses injected have been 0 gr. 20 cgs. to 0 gr. 40 cgs. daily, with the addition of 6 to 12 drops of Carbolic Acid by mouth; and chloral, bromide and opium during the night. The patient, admitted on the 29.12.03, was discharged completely cured on the 9.2.04.

In April 1906, whilst in charge of the hospital, I had to deal with a very bad case of traumatic tetanus. I used Carbolic Acid hypodermically with a fair success. The most remarkable fact connected with this case, is the great amount of Carbolic Acid injected or swallowed, throughout the course of the illness, without producing any poisonous effect on the system, nor any local injury, not even pain when injected. The doses injected were 1 gramme at a time, amounting to 3 grammes per 24 hours, plus 30 to 40 drops per month.

#### *Clinical Observations :—*

18.4.—Pierre Louis, a creole mason, aged 67 years, was admitted in hospital on the 18.4.06, with a contused wound of the left hand, produced by a sharp stone. The wound, situated on the dorsal aspect of the hand, was 4 cms. long, irregular and deep, involving deeper tissues, the tendons, and probably some nerves. It had been made three days previous to his admission in hospital, and, had been dressed and sutured by the dispenser of a sugar estate.

That wound had a very bad aspect, the tissues were torpid, there was no suppuraton, but a serous discharge having an offensive smell similar to that of Gangrene. The patient was without fever. I suspected diabetes and on analysis the urine revealed a large quantity of sugar.

I removed the silver sutures, cleaned the wound and applied a wet dressing of bi-iodide of mercury solution of 1 in 2,000. I prescribed treatment and diet as for diabetes. The drugs were Sodii Cacodylas given in increasing doses from one to three grains and decreasing daily by half a grain to one grain; Rum and an infusion of the plant Jean-Robert (*Euphorbia pilulifera*).

29.4.—Twelve days after admission the wound had improved but had not as yet healed. At that moment, the patient complained that his hand was the seat of pain and that he experienced difficulty in opening his mouth. His face presented some rigidity in the muscles of expressions. I prescribed chloral and bromide, of each 10 grains, with Laudamm 10 drops to be given every hour except when the patient was asleep. I sent for antitetanic serum. (Vide annexed chart).

30.4.—The trismus is well marked, the muscles of the head and neck become involved as well as those of the left hand and of the left fore-arm. A bottle of antitetanic serum is injected.

1.5.—The contraction of the muscles is more marked, deglutition is somewhat impeded, the muscles of the back and of



the whole left arm are involved. From time to time these muscles are thrown into spasm. A second bottle of serum is injected.

2.5.—The symptoms are worse, spasms are more frequent, the whole trunk is stiffened with a tendency to emprosthotonos during the convulsions. A third bottle of antitetanic serum is injected. In addition to the chloral, bromide and opium which have been continued, I prescribe six drops of pure Carbolic acid, to be given in milk every 2 hours up to 30 drops.

3.5.—The abdominal and thoracic muscles are implicated. The patient can hardly move his legs. A fourth bottle of serum is injected and the same treatment continued.

4.5.—The spasms last longer, the paroxysms are more frequent. The intellect is clear, but the patient can hardly speak owing to the condition of the muscles of the face, neck and thorax; he cannot breathe freely. There are no more traces of sugar in the urine.—One gramme of Camphorated Carbolic Acid is injected (half a gramme twice daily), and 30 drops given in milk (6 drops every two hours). The mixture of chloral, bromide and opium is discontinued.

5.5 to 13.5.—Same treatment with addition of  $\frac{1}{2}$  grain of morphia at night. The contractures and spasms are less painful and frequent, but the whole body is stiff. The slightest touch of the wounded hand produces convulsions. The dressing of the wound is made with a strong solution of alcoholic camphorated Carbolic acid and Morphia.

14.5.—Same conditions, 0 gr. 50 cgs. of camphorated Carbolic acid are injected every 8 hours, and 40 drops given in milk.

16.5.—The quantity of Carbolic acid is doubled. One gramme is injected every 8 hours,  $\frac{1}{2}$  grain of morphia being added to the injection of the night.

17—19.5.—The improvement is manifest. The treatment is continued.

20. 5.—Spasms and convulsions are rare. Only two injections of one gramme are made and the morphia ceased.

21.—24. 5.—Only one injection of one gramme is made, but the 40 drops are still swallowed. The wound is healed.

25. 5.—The conditions are still improved. The patient can masticate his food. The contracture only exists in the wounded hand and in the fore-arm. Spasms are localized in those parts and local convulsions of the muscles are produced by the attempt at extension of the hand, which is in a state of rigid pronation.

Carbolic acid is only given by mouth: 40 drops per 24 hours.

30.5.—Stiffness of the hand still exists, but no spasm is provoked by pressing on it. Only 30 drops of Carbolic Acid are now given.

31. 5 to 10. 6.—Carbolic Acid is given at the dose of 10 drops by the mouth daily; and as the general condition is very good, although the hand is still rigid, the treatment is stopped on the latter day.

From that moment to the time of his discharge on the 4. 7. 06 the stiffness of the hand gradually diminishes, but it had not entirely disappeared.

During all the time I observed the urine, it presented but a slightly brownish colour, although when tested the presence of Carbolic Acid was revealed.

The quantity of urine passed oscillating between 1 litre—1 lit. 75 and 1 lit. 25 during the bad period.

When the man left the hospital, the diabetes was also cured.

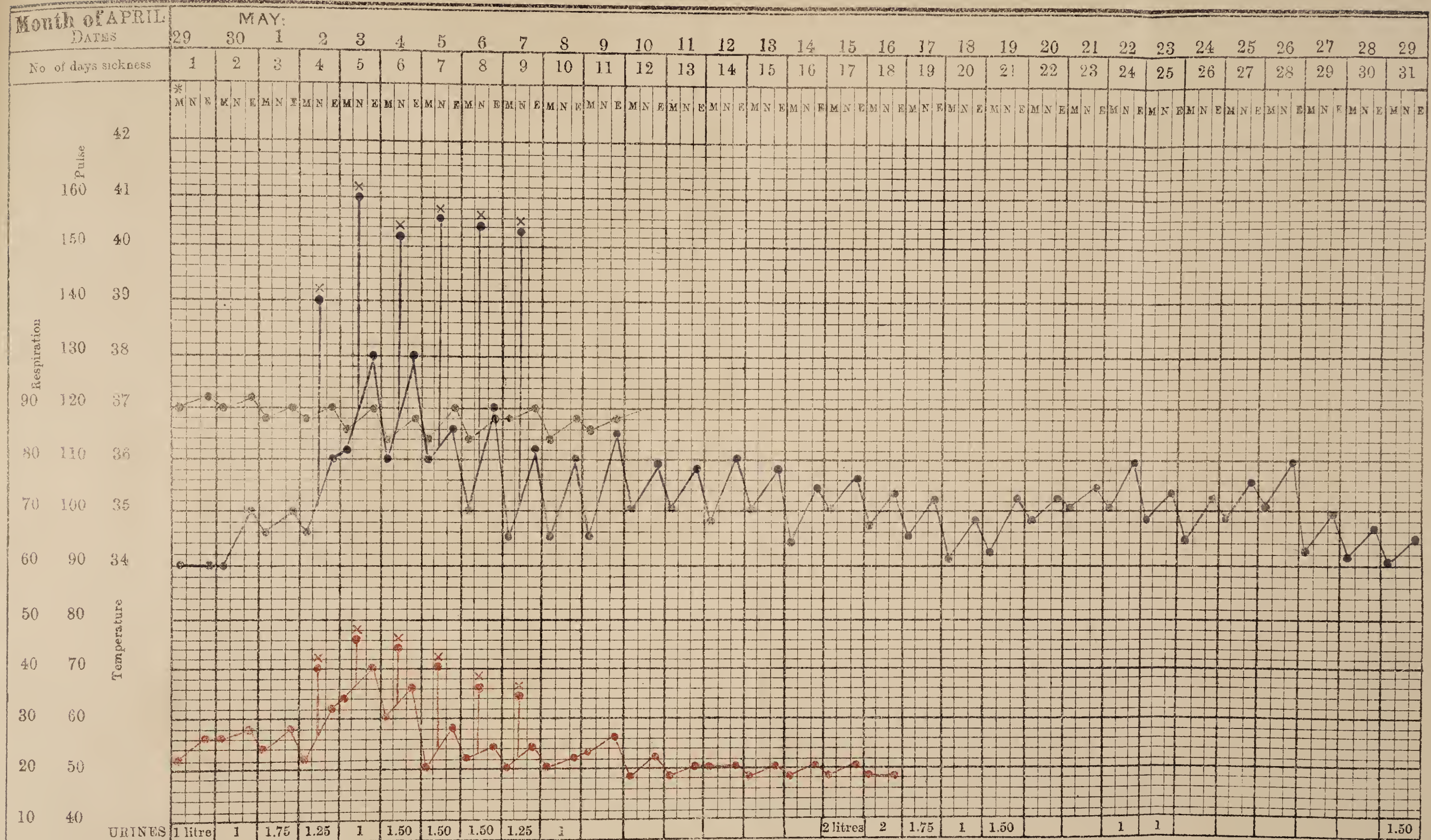
The formula, which had also given good results in the hands of my father and which I adopted, is the following:—

|                         |                               |
|-------------------------|-------------------------------|
| ( Carbolic Acid (cris:) | 0 gr. 20 cgs.                 |
| ( Camphor (purif:)      | 0 „ 03 —                      |
| ( Glycerine —           | 1 c. centimetre (to dissolve) |
| ( Water (dist:)         | 2 cubic centimetres.          |



NAME OF PATIENT : PIERRE LOUIS. AGE : 67. SEX : Male. ADMITTED on 18.4.06 and DISCHARGED on 4.7.06. WARD A.

**DIAGNOSIS :** Tetanus (traumatic).



\* M—Morning  
N—Noon  
E—Evening

Pulse  $\times$  during the convulsions.

Respiration ~~X~~ during the convulsions.

Temperature \_\_\_\_\_

## Pulse

Respiration -----



ra

at

In this case the quantity of Carbolic Acid injected during 22 days has been 25 grammes 50 cgs. spread as follows :—  
2 injections of 0 gr. 50 each during 10 days + 30 drops by the mouth.

|   |     |          |     |   |     |       |     |
|---|-----|----------|-----|---|-----|-------|-----|
| 3 | ... | do.      | ... | 2 | ... | + 40  | do. |
| 3 | ... | 1 gramme | ... | 4 | ... | + do. | do. |
| 2 | ... | do.      | ... | 1 | ... | + do. | do. |
| 1 | ... | do.      | ... | 5 | ... | + do. | do. |

It will be seen that, in the meantime, the patient had absorbed by the mouth about 800 drops of Carbolic Acid, which at 27 drops per gramme amount to nearly 30 grammes.

#### *Deductions ;*

The greatest doses which have ever been used in Europe were 1 gramme to 1 gramme 50 daily, whilst the quantity administered in my case amounted to 3 grammes without mentioning the 40 drops given by mouth (about 1 gr. 50). Yet, this large amount of Carbolic Acid absorbed by the patient gave rise to no inconvenience. I am justified in my medication by the result obtained ; and, also, by the argument of Mr. Bacelli, who states that the proof of the toleration to the drug is in a direct ratio to its indication, and of Mr. Ascoli : that it is necessary to use Carbolic Acid “*larga manu*” in Tetanus.

As a matter of fact, doses of 0, 10 cgs. and more are the only truly and rapidly efficacious.

The capital point is to keep a close control of the urines. As to the solution to be injected, I read that the one used is : 0 gr. 2 per 100 c. c. of water. (Dr. Ocherovsky).

The addition of Camphor and of Glycerine to Carbolic Acid takes off from the acid its corrosive effects, as my father and myself have observed, our formula being : 0 gr. 2 per 2 cubic centimetres of liquid.

The formula used by the Italian practitioners is not given. In the solution of Dr. Ocherovsky the quantity of liquid to be injected seems too great ;—i. e., 250 of water for 0 gr. 50 of Carbolic Acid, as numerous injections have to be made.

The solution I have used, and of which I have given the formula above, might be diluted to twice or five times its bulk according to the effect on the patient.

I mention this because having tried the solution on a patient suffering from myalgia or neuralgia of the neck, which disappeared after the first injection, I observed pain to pressure during two or three days over the injected region, (*supra scapula*).

At all events, the addition of Camphor checks the irritating action of Carbolic Acid while it also constitutes a useful, if not necessary adjuvant. It may perhaps, in addition, act through its well known antiseptic and sedative action on the nervous and circulatory systems as well as by its anæsthetic properties.

DR. L. VINSON,

Acting Govt. Medical Officer,  
Moka Hospital.

#### ANNEXURE XIII.

#### Annual Report

#### *On the work performed by the Government Analyst in 1906.*

Forty-eight medico-legal investigations, involving the separate analysis or examination of 365 different articles or pieces of conviction were undertaken for the Judicial Department, and



45 analyses or reports, referring to 54 articles, were completed for the Medical and Health and other Departments, and for the Municipality.

The total number of investigations amounted to 93 and the articles examined or reported upon came up to 419, showing a total increase of 38 on the work done in 1905.

2. Although there was an apparent decrease in the work done for the Medical and Health and other Departments, owing to the heavy increase in that required for the Judicial Department and the want of assistance in the way of a skilled servant permanently attached to the laboratory, the long investigations usually required by the former Departments could not all be completed, and some have had to stand over.

In order to obviate these delays and facilitate the work of this useful laboratory, I trust, therefore, that the assistance I have applied for will soon be forthcoming.

*Analyses performed for the Judicial Department.*

3. The 48 medico-legal investigations were undertaken at the request of the Magistrates of the following Districts and Dependencies :—

|                            | Number of investigations. | Number of articles examined. |
|----------------------------|---------------------------|------------------------------|
| Port Louis ... ..          | 10                        | 43                           |
| Moka ... ..                | 9                         | 60                           |
| Grand Port ... ..          | 6                         | 29                           |
| Pamplemousses ... ..       | 6                         | 30                           |
| Plaines Wilhems ... ..     | 5                         | 22                           |
| Savanne ... ..             | 4                         | 73                           |
| Rivière du Rempart ... ..  | 3                         | 16                           |
| Facq ... ..                | 2                         | 17                           |
| Rodrigues ... ..           | 2                         | 66                           |
| Lesser Dependencies ... .. | 1                         | 9                            |
| Total ... ..               | 48                        | 365                          |

4. And were required in connection with the following cases:—

|                                                              | Number of cases. | Number of articles examined. |
|--------------------------------------------------------------|------------------|------------------------------|
| Rape ... ..                                                  | 19               | 105                          |
| Murder ... ..                                                | 8                | 170                          |
| Attempt at murder ... ..                                     | 5                | 43                           |
| Poisoning or alleged poisoning ... ..                        | 7                | 21                           |
| Sodomy ... ..                                                | 3                | 9                            |
| Infanticide ... ..                                           | 1                | 1                            |
| Illicit distillation... ..                                   | 4                | 15                           |
| Mischievously throwing corrosive substance on clothes ... .. | 1                | 1                            |
| Total ... ..                                                 | 48               | 365                          |

5. The alleged cases of poisoning were of no special interest. In most of them nothing was found. In one case the so-called poison consisted of bone scrapings. In the case of a chicken supposed to have been poisoned by being mischievously fed with rice steeped in brine, no salt was found in its crop or gizzard. In fact it was shown to have died from disease.

The corrosive substance which was mischievously thrown on the clothes of some women at an Indian gathering was found to be sulphuric acid.

6. One of the criminal cases from Rodrigues was very interesting from a medico-legal point of view, and as it may be of special interest to Government Medical Officers who may have to deal with similar cases in their professional capacity, a short account thereof may not be out of place in this report. The evidence against the accused, two Chinamen, was chiefly circumstantial and it was of great importance to ascertain the probable time at which the murder had taken place.

The assistant of a Chinese shop-keeper at Port Mathurin on returning to his work one morning found the front door of his master's shop still closed, while the shutters of the back door were ajar. On entering he saw him stretched on the floor with his neck cut.

The Police was informed and a rusty shop knife stained with blood found on the counter. The floor and surrounding objects were bespattered with blood and traces thereof observed on the shutters of the back door. There was no evidence of a scuffle in the shop and the money in the till had not been removed. A basin usually kept behind the shop on a bench was found overturned in the back yard. Suspicion fell on the two accused who had been seen in the shop on the previous night. This was strengthened by their having been seen bathing in the sea late on the same evening near a boat shed situated not far from the back of the said shop. Traces of mammalian blood were found on the gunwale of a boat under this shed and also in a cleft of a piece of straw adhering to a cake of soap picked up in the grass close by.

The accused were unable to produce the clothes they had worn on the previous evening.

Their hands and nails, which were generally dirty, were found to have been washed and cleaned. The missing clothes were afterwards accidentally discovered, still bearing traces of blood, under a pile of rubbish on the outskirts of the village.

The probable time at which the crime had taken place was inferred from the following facts :—

The shop assistant stated that he had filled and trimmed the chinaman's petroleum lamp and that a few minutes after, he had lit it before leaving for the night. He was quite sure of the time as he had heard the Roman Catholic Church bell ring at 6. p. m. while attending to the lamp. At 9 p. m. the shop was still alight and deceased had been seen by the Police Sergeant of the place playing at Chinese chess with the accused at the counter. The lamp was found on the next day with its wick turned down and traces of blood on the metallic part near the chimney.

The lamp was secured and the oil it still contained placed in a stoppered bottle and sent to me for experiment. The oil measured 488 c. centimetres. I poured it back into the lamp, put on a chimney and allowed it to burn exactly for one hour with a flame of fair size, just high enough not to allow the chimney to smoke.

The oil when remeasured showed that 54 c.c. had been consumed. The total capacity of the lamp, up to the level of the fill-



ing hole, was found to be 708 c.c. Hence if this lamp had been lit soon after it had been filled up, as alleged by the shop assistant, 220 c.c. (708—488) of oil must have been consumed when it was put out, and at the rate of 54 c.c. per hour, as in the experiment I made, this would give a period of about 4 hours during which the lamp must have been kept burning. The approximate time of the crime was therefore about 10.15 p.m. The accused were both found guilty by the Jury and sentenced to 15 years hard labour.

7. The question of the distance at which a revolver shot had been fired was raised in one of the cases of attempt at murder.

A bullet hole in a cabaye worn by the victim had around it a circular greyish discoloration (measuring about 2 inches in diameter) brownish about the centre. A microscopical and chemical examination showed that the discoloration was due to the projection of unconsumed fragments of powder and to partial charring produced by the explosion of the fire arm.

As it was alleged that this effect could have been produced by the revolver having been fired at a distance of 18 inches from the cabaye, I made experiments on a white rag to settle this point. The revolver used by the accused not having been found by the Police, one of about the same bore as the hole in the cabaye was used and fired at the stretched rag at varying distances.

The result was that a discoloration of the same extent as that referred to above was only obtained at a distance of 2 to 3 inches from the muzzle.

At 6 inches, a slight greyish mark, measuring about 1 inch in diameter, was obtained, and beyond this, up to 18 inches, only a few scattered black specks due to the projection of fragments of unburnt powder were observed.

8. One of the murder cases from Savanne, in addition to the unusually large number of pieces of conviction (60) which were sent up for examination, presented special medico-legal interest from the fact that great importance was attached to the nature of certain reddish stains found on the floor of a room in which the victim was alleged to have been killed, and which I affirmed to be due to mammalian blood.

As only one witness had seen the deed committed the defence vainly tried to discredit my evidence on the grounds that I had trusted chiefly to a microscopical examination of the stains to assert that it was mammalian blood, while I had not tried the guaiacum test.

I had steeped portions scraped off from the stains in a strong solution of sulphate of soda, and had on breaking up these portions with needles been able to see with a good Zeiss Microscope ( $\times 500$  diameters) well marked circular blood corpuscles of the size and shape of those of mammals.

I had not attached much importance to the guaiacum test in this case for the reason that as the blue colour it produces with blood may, as stated by Lefort, be obtained with saliva a reddish stain on a floor due to expectorated betel juice, subjected to this test, might have led to an erroneous inference.

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*Analyses performed for the Medical and Health and other Departments.*

9. The analyses and reports were distributed as follows :—

| Departments.                                       | Number of Analyses. | Number of samples. |
|----------------------------------------------------|---------------------|--------------------|
| Medical and Health Department ...                  | 8                   | 8                  |
| Sanitary Warden and Assistant Sanitary Wardens ... | 16                  | 20                 |
| Receiver General's Department ...                  | 1                   | 4                  |
| Government Medical Officer, Black River ...        | 1                   | 1                  |
| Barkly Asylum ...                                  | 10                  | 12                 |
| Municipality ...                                   | 9                   | 9                  |
| Total ...                                          | 45                  | 54                 |

10. These analyses and reports had reference to the following articles :—

| Articles.                                             | Number of Analyses. | Number of samples. |
|-------------------------------------------------------|---------------------|--------------------|
| Milk ...                                              | 22                  | 26                 |
| Lard ...                                              | 2                   | 2                  |
| Margarine ...                                         | 1                   | 1                  |
| Olive oil ...                                         | 1                   | 1                  |
| Tinned Salmon ...                                     | 1                   | 1                  |
| Salt fish ...                                         | 2                   | 2                  |
| Brine ...                                             | 1                   | 1                  |
| Medicine ...                                          | 1                   | 1                  |
| Rice ...                                              | 1                   | 1                  |
| Urine (Quantitative analysis) ...                     | 8                   | 10                 |
| Pathological specimens (plague bacilli, pus, &c.) ... | 2                   | 2                  |
| Substance for denaturing alcohol ...                  | 1                   | 4                  |
| Testing thermometer ...                               | 1                   | 1                  |
| „ lactometer ...                                      | 1                   | 1                  |
| Total ...                                             | 45                  | 54                 |

11. Milk analyses were reported upon as follows :—

| Samples. | Adulteration.                            |
|----------|------------------------------------------|
| 14 ...   | From 10 o/o to 41 o/o water and skimmed. |
| 4 ...    | „ Skimmed.                               |
| 2 ...    | .... Contained colostrum.                |
| 6 ....   | .... Not adulterated.                    |

In presence of the high percentage of adulteration of the milk in some cases and the practice of skimming so often resorted to by certain milk sellers in this Colony, I trust that the recommendations I have made in my last two or three Annual Reports for the adoption of a fixed standard of purity for the sale of milk, similar to that adopted by the Board of Agriculture of England, will at an early date be given effect to, in the interest of the public health.



Two of the samples of milk were sent up for analysis owing to their unusually high densities (10.36 and 10.39). This was found to be due to the milk containing colostrum and a high percentage of albuminous substance, when drawn too soon after the birth of the calf. Such milk coagulated when boiled.

12. The question of the purification of the Mare-aux-Vacoas water again came up for discussion last year. It was proposed, in addition to the substitution of crushed stone for coral sand in the filter beds and the construction of a second set of aerating trays, which I had advocated, to increase the treatment of the water with iron and air in the revolver of Anderson's purifier, so as to obtain a dissolution of the maximum quantity of iron in the water and, if insufficient, to provide a second revolver and blower. I submitted that however perfect in theory this treatment of the crude water with excess of scrap iron and air could be, in practice it would be found not to work well. My analyses had shown that when the iron was increased beyond a certain proportion in the revolver there was not only an excess of carbonate and oxide of this metal deposited in the filter beds which clogged and rendered them inefficient, but a large amount of the iron passed in a soluble form as bi-carbonate in the water distributed to consumers.

This was so marked in the supply to the lower parts that at the Lunatic Asylum a reddish deposit of rust could be seen on the whitewashed sides of a basin as soon as any portion of the water overflowed, while a bluish colour was immediately obtained on adding a solution of ferrocyanide of potassium acidulated with hydrochloric acid to any portion of the water.

I suggested that in presence of the high opinion expressed in Parkes Hygiène on the value of spongy iron as an oxidiser for organic matter small blocks of this substance might be made to replace a certain quantity of the scrap iron in the revolver, and in case a second one were constructed, as proposed, small compact blocks of permanganate of lime used in the "Filtre Lutèce" and so favourably reported upon by the authorities of the Municipal Laboratory of Paris, might be introduced therein.

This permanganate while acting on any portion of organic matter left untouched by the spongy iron in the first revolver would have also the effect of oxidising and rendering insoluble any surplus of iron that might have been taken up by the water.

Should however this proposal be found impracticable, I feared that unless arrangements could be made for further aerating the water after treatment with excess of scrap iron and allowing for a more extensive area of shallow depositing tanks, the filters would soon become unserviceable and a chalybeate water distributed to consumers, with all the objections attendant on the use of such water for domestic purposes.

13. Owing to the scarcity of the rice supply and the consequent high prices paid for it in the Colony in 1906, the question of finding local substitutes for this important article of diet was considered by Government. As Government Analyst I was requested to advise as to the available substitutes which could be proposed from a scientific point of view. I submitted that the only ones which could be obtained in sufficient quantity for the purpose were flour (baked as bread or cooked) maize, potatoes, sweet potatoes and manihot. In order to compare them from a nutritive point of view, it was necessary to consider chiefly their relative percentages of proteids and of carbo hydrates.

These elements, for rice and the three first articles, are given as follows in Parkes Hygiene:

|                                    | Proteids. | Carbo hydrates. |
|------------------------------------|-----------|-----------------|
| Rice                               | ... 6 %   | 83.2 %          |
| Flour                              | ... 11 "  | 71.2 "          |
| Bread, white or<br>average quality | ... 8 "   | 49.2 "          |
| Maize                              | ... 10 "  | 64.5 "          |
| Potatoes                           | ... 2 "   | 21 "            |

From this it will be seen that a small loaf weighing about 225 grammes and containing 18 grammes of proteids and 110.7 of carbo hydrates could be given to replace with advantage (as regards the proteids) say 200 grammes of rice. But as the latter would contain 166.4 grammes of carbo hydrates against 110.7 in the bread, the deficit might be made up by adding some potatoes, say 150 grammes to a ration, for an adult. If flour were issued instead of bread about 160 grammes might be given to replace 200 grammes of rice, but some oil, say gingely or pistachio nut, would have to be supplied to have it cooked into cakes.

175 grammes of crushed maize, having a composition as regards proteids and carbo hydrates very close to that of flour may be given in lieu of part of the rice ration, but as the maize contains 6.7 o/o of fats there would be no necessity to issue oil with it as the maize might be cooked with the part of the rice ration given.

Potatoes being very deficient in proteids and carbo hydrates could not advantageously replace rice, except in part of the ration.

I could not unfortunately advise on the nutritive value of sweet potatoes and manihot, having no exact analyses thereof in my possession; but I had some doubt whether they could be accepted as substitutes in Government Institutions except for a short time, as it was feared that they might bring on dyspeptic or intestinal derangements in those not accustomed to their use.

This question is however one which requires further consideration and I trust that in time useful food-stuffs will be introduced in this Colony in such quantities as practically to render us independent of the rice supply from India.

20th. April, 1907.

J. I. PADDLE,

Government Analyst.



